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20 *Attorneys for Plaintiff Koss Corporation*

21
22 UNITED STATES DISTRICT COURT
23
24 NORTHERN DISTRICT OF CALIFORNIA

25 KOSS CORPORATION,
26 Plaintiff,
v.
27 PLANTRONICS, INC. and POLYCOM, INC.,
28 Defendants.

Case No. 21-cv-03854-JST

**SECOND AMENDED COMPLAINT
FOR PATENT INFRINGEMENT**
DEMAND FOR JURY TRIAL

SECOND AMENDED COMPLAINT FOR PATENT INFRINGEMENT

29 Plaintiff, Koss Corporation (“Koss”), files this second amended complaint for patent
30 infringement against Plantronics, Inc. and Polycom, Inc. (“Plantronics” or “Defendants”) alleging,
31 based on its own knowledge as to itself and its own actions, and based on information and belief as
32 to all other matters, as follows:

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1 **NATURE OF THE ACTION**

2 1. This is a civil action arising under the patent laws of the United States, 35 U.S.C.
 3 § 1 et seq., including specifically 35 U.S.C. § 271, based on Plantronics's willful infringement of
 4 U.S. Patent Nos. 10,206,025 (the "025 Patent"), 10,469,934 (the "934 Patent"), 10,506,325 (the
 5 "325 Patent"), 10,757,498 (the "498 Patent"), and 10,848,852 (the "852 Patent") (collectively the
 6 "Patents-in-Suit").

7 **THE PARTIES**

8 2. Plaintiff Koss Corporation is a corporation existing under the laws of the State of
 9 Delaware having its principal place of business located at 4129 North Port Washington Avenue,
 10 Milwaukee, Wisconsin 53212.

11 3. Koss markets a complete line of high-fidelity headphones and audio accessories.
 12 Koss's products, branded under the Koss brand name or private label brands, are sold at various
 13 retail chains throughout the United States and the world, including Walmart stores and other large
 14 brick-and-mortar establishments, as well as direct to customers in at least the following cities in
 15 this District: San Jose, San Leandro, Richmond, Mountain View, San Ramon, Milpitas, Livermore,
 16 and Union City.

17 4. Koss also serves as an Original Equipment Manufacturer ("OEM") for a customer
 18 in this Judicial District. In this role, Koss manufactures OEM headphones sold under its customer's
 19 brand.

20 5. On information and belief, Plantronics, Inc. is a Delaware Corporation with its
 21 principal place of business at 345 Encinal St., Santa Cruz, California 95060. Plantronics may be
 22 served through its registered agent CT Corporation System, 818 Seventh Street, Ste. 930 Los
 23 Angeles, CA 90017. On information and belief, Plantronics, Inc. is registered to do business in the
 24 State of California and has been since at least May 24, 1989.

25 6. On information and belief, Polycom, Inc. is a Delaware Corporation with its
 26 principal place of business at 345 Encinal Street, Santa Cruz, California 95060. Polycom, Inc. may
 27 be served through its registered agent CT Corporation System, 818 Seventh Street, Ste. 930 Los

1 Angeles, CA 90017. On information and belief, Polycom, Inc. is registered to do business in the
2 State of California and has been since at least May 17, 1991.

3 7. On information and belief, on or about March 28, 2018, Plantronics, Inc. acquired
4 Polycom, Inc. On information and belief, by March 2019, Plantronics, Inc. and Polycom, Inc.
5 integrated their business operations, management, facilities, and product offerings. On information
6 and belief, the combined businesses of Plantronics, Inc. and its wholly-owned subsidiary Polycom,
7 Inc. conducts their combined business operations under the name “Poly.” On March 18, 2019,
8 “Plantronics, Inc. . . . announced that the company will transform into Poly, a technology company
9 focused on the human experience of communications and collaboration, aiming to make
10 communication as rich and natural as in-person. Poly, which means, ‘many’ leverages the legendary
11 audio and video expertise of Plantronics and Polycom” Meet Poly: Plantronics + Polycom
12 Relaunches To Focus On Driving The Power Of Many, POLY WEBSITE, available at:
13 <https://www.poly.com/us/en/about/newsroom/plantronics-and-polycom-nowtogether-as-poly>.

14 8. On information and belief, product development and marketing for the alleged
15 infringing Plantronics and/or Polycom products takes place in Santa Cruz, California.

16 9. Plantronics has transacted business in this District and has committed acts of direct
17 and indirect infringement in this District by, among other things, importing, offering to sell, and
18 selling products that infringe the asserted patents.

JURISDICTION AND VENUE

20 10. This Court has subject matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a)
21 because the claims herein arise under the patent laws of the United States, 35 U.S.C. § 1 et seq.,
22 including 35 U.S.C. § 271.

23 11. This Court has personal jurisdiction over Plantronics in this action because
24 Plantronics has committed acts of infringement within the State of California and within this
25 District through, for example, the sale of Plantronics headphones, such as BackBeat-branded
26 headphones, both online and from the retail locations of its partners in this District. Plantronics
27 regularly transacts business in the State of California and within this District. Plantronics engages
28 in other persistent courses of conduct and derives substantial revenue from products and/or services

1 provided in this District and in California, and has purposefully established substantial, systematic,
2 and continuous contacts within this District and should reasonably expect to be sued in a court in
3 this District. For example, Plantronics's principal place of business is in this District and it has a
4 California registered agent for service. Plantronics operates a website and various advertising
5 campaigns that solicit sales of the infringing products by consumers in California and this District.
6 Plantronics has entered into partnerships with numerous resellers and distributors to sell and offer
7 for sale the various at-issue headphone or earphone products to consumers in this District, both
8 online and in stores, and offers support service to customers in this District. Given these contacts,
9 the Court's exercise of jurisdiction over Plantronics will not offend traditional notions of fair play
10 and substantial justice.

11 12. Venue in the Northern District of California is proper pursuant to 28 U.S.C. §§
12 1391(b), (c) and 1400(b). Plantronics has at least one regular and established place of business in
13 this District, including, at 345 Encinal St., Santa Cruz, California 95060.

13. Plantronics has committed acts within this judicial district giving rise to this action.
14
15 Plantronics continues to conduct business in this judicial district, including one or more acts of
16 making, selling, using, importing and/or offering for sale infringing products or providing support
17 service to Plantronics's customers in this District.

KOSS'S LEGACY OF AUDIO INNOVATION

14. Koss was founded in 1953 as a television rental company in Milwaukee, Wisconsin.

20 15. In 1958, John C. Koss invented the world's first SP/3 Stereophone as part of a
21 "private listening system" that would enable the wearer to listen to a phonograph without disturbing
22 others in the vicinity:



16. The SP/3 Stereophone provided, for the first time, a high-quality stereophonic
17. headphone that approximated the sounds of a concert hall.

18. John C. Koss demonstrated the SP/3 Stereophone at a Wisconsin audio show in
19. 1958. Initially designed to demonstrate the high-fidelity stereo sound that a portable phonograph
20. player delivered, these revolutionary SP/3 Stereophones became the hit of the show.

21. 18. The SP/3 Stereophone has since been enshrined in the Smithsonian Museum's
22. collection in Washington, DC, with John C. Koss delivering the SP/3 for enshrinement along with
23. an explanation of the story of the SP/3 in 1972:



1 19. Koss's commitment to headphone development continued into the 1960s and
2 beyond. In 1962, Koss developed and brought to market the PRO/4 Stereophone, which was
3 bestowed with Consumer Union Magazine's #1 choice award in 1963:



13 20. Due to the success and quality of the Pro/4, the United States government awarded
14 Koss with a contract to install fifty (50) Pro/4 units in the staff, press, and presidential quarters of
15 Air Force One. Passengers accessing the aircraft's state-of-the-art entertainment system listened
16 to the system using the Pro/4:



1 21. In 1970, Koss moved its World Headquarters to the current location at 4129 North
2 Port Washington Ave., Milwaukee, Wisconsin:



12 22. Also in 1970, Koss set the standard for full-size professional headphones with its
13 Pro/4AA:



23 23. At the time of introduction, the Pro/4AA was regarded as the first dynamic
24 headphones to deliver true full frequency and high-fidelity performance with noise-isolating
25 capabilities.

26 24. Koss continued improving its Stereophone product line throughout the 1970s and
27 into the 1980s. In 1984, Koss introduced the Porta Pro, an acclaimed product that set performance
28 and comfort standards for on-the-go listening:



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14 25. The Porta Pro continues to be one of the most popular headphone products around
15 the world, particularly because of its exceptional audio fidelity and performance capabilities. In
16 fact, as recently as 2008, CNET awarded the Porta Pros a four-star rating of 8.3 (out of 10), with a
17 performance score of 9 (out of 10), stating that “there’s no denying the sound quality here: they’re
18 the ideal companion for mobile audiophiles and home theater enthusiasts.”
19 (<https://www.cnet.com/reviews/koss-portapro-with-case-review/>).

20 26. In 1965, Koss introduced the award-winning speaker, the Acoustech X, which was
21 heralded as a breakthrough product by Billboard Magazine, touting its concert hall quality and
22 ability to accurately amplify an acoustic guitar to large concert halls. *Acoustic System Succeeds In*
23 *Classical Guitar Concert*, BILLBOARD, May 27, 1967, at 71.

24 27. Following on Acoustech X, Koss went on to develop a number of additional
25 products: the world’s first computer maximized loudspeaker in 1976; the Kossfire speaker line in
26 the 1980s; the dynamic audio/video Dynamite bookshelf series speaker line; a line of portable/
27 desktop computer speakers that employed a unique magnetic shield to protect nearby computer
video and data equipment; and an amplified portable loudspeaker, the M/100, in early 1987.

1 28. In 1987, Koss pioneered one of the earliest completely wireless infrared speaker
 2 systems: the JCK 5000. In 1986, Koss also unveiled a portable speaker, the KSC/50, which was
 3 utilized by thousands of members of the United States military during the Gulf War in 1990.
 4 Related to the KSC/50, Koss's KSC/5000 included a built-in amplifier. Those products were
 5 profiled in a Newsweek feature on October 12, 1987:



18 A little light music: Michael Koss (left) and father John with new cordless speakers

19 **Koss Corp.'s Audio Advantage**

20 **A Midwestern firm innovates in stereo**

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 23 29. Over the following years, Koss continued to expand its portable speaker offerings,
 24 including by expanding into speakerphones for teleconferencing systems with the Speakeasy line,
 25 followed by various additional wireless models for portable use.

26 30. Elite musicians including Tony Bennett, Les Brown, and Frank Sinatra Jr., have
 27 used Koss headphones, including the Pro/4, while recording and/or performing. Koss's official
 28

1 spokespeople have included music legends Mel Tormé and Doc Severinsen, the trumpet-playing
 2 bandleader for Johnny Carson's Tonight Show band.

3 31. In 1979, John C. Koss was inducted into the Audio Hall of Fame.

4 32. In 2000, John C. Koss was inducted into the inaugural class of the Consumer
 5 Electronics Hall of Fame.

6 33. In 2004, John C. Koss was inducted into the Wisconsin Business Hall of Fame.

7 **KOSS DEVELOPS THE FIRST EVER TRUE WIRELESS HEADPHONES**

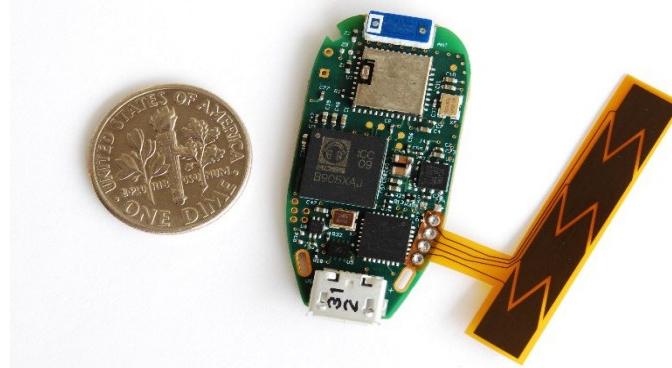
8 34. Continuing its culture of innovation in high-fidelity audio equipment, in the early
 9 2000s, Koss began developing what became known as the "Striva" project. The vision for the
 10 Striva project was borne out of Koss's recognition that wireless headphones were going to be an
 11 integral part of peoples' audio consumption. In particular, Koss recognized that as radios were
 12 needing progressive less power and as batteries and other power sources became smaller and more
 13 efficient, people would eventually consume audio content through headphones wirelessly
 14 connected to some kind of a source, be it a handheld computing device or in the cloud.

15 35. In the early 2000s, Koss began making substantial monetary investments in the
 16 Striva project, with the goal of bringing "True Wireless" listening to its loyal customers as the next
 17 in a long series of headphone innovations.

18 36. Koss recognized that the future was a wireless world, complete with mobile internet
 19 connectivity that went beyond traditional hardwired, or computer-based, network topologies. It
 20 recognized that wireless ubiquity was coming, and would extend to wearable devices, including
 21 Koss's area of expertise: the headphone.

22 37. With these recognitions in mind, Koss made a substantial commitment to investing
 23 in what it saw as the future of headphone technology. This work eventually became the Striva
 24 project, and over the course of its work, Koss invested tens of millions of dollars developing chips,
 25 fabrication techniques, prototype headphones, and other related technology to bring the Striva
 26 vision to life.

1 38. In particular, Koss's work on Striva resulted in the development of a system-on-chip
2 smaller than a human fingertip that could provide audio and wireless communications processing
3 on a low power budget for incorporation into headphones of various form factors:



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12 39. Koss's work to develop Striva also predicted some of the interactions that modern
13 headphone users take for granted today. In particular, Koss recognized early on that the inclusion
14 of a microphone (with appropriate voice recognition software and circuitry) could provide a
15 convenient, hands-free way to interact with wireless headphones. Koss developed technology that
16 could react to such voice prompts, and in fact implemented prototypes that reacted to users saying
17 "Striva" into a headphone-mounted microphone to begin a voice-based interaction to, for example,
18 switch tracks or adjust headphone volume.

19 40. Koss also recognized a headphone concept that users today take for granted:
20 different headphones for different applications. In particular, as part of the Striva project, Koss
21 developed different form factors with different performance capabilities depending on anticipated
22 use. Over-ear headphones provided users with higher-quality sound, ambient noise dampening
23 capabilities, and better battery life (due to additional battery real estate), while in-ear headphones
24 provided portability and capability in a smaller, less-intrusive package.

25 41. Koss developed prototype in-ear headphones that relied on its chip development
26 efforts, with working prototypes from the mid-2000s looking very much like commonly-known
27 consumer products that flood the market a decade-and-a-half later:



42. In 2012, Koss introduced Wi-Fi enabled headphones, the result of its Striva project, which BizTimes hailed as the first wireless headphones to use Wi-Fi transmission and credited Koss with “introducing personal listening to the Internet.” (<https://biztimes.com/koss-creates-wireless-headphones-for-wi-fi-music-access/>).

43. In April 2012, Koss brought to market both an in-ear and over-ear embodiment of the Striva vision, with the Striva Pro model being the first true Wi-Fi over the ear headphones (and mirroring many features and aesthetics modern-day users expect in wireless, over-ear headphones):



44. The Striva Tap, a smaller, in-ear version of the Striva Pro Wi-Fi headphone, provided users with some of the features that modern-day consumers take for granted in in-ear headphones, like independent wireless earphones with touch gestures to control listening preferences by manipulating the surface of the headphones:



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11 45. Koss also developed (though ultimately did not market) a smart speaker that
12 incorporated many of the Striva features, albeit in a non-wearable form factor. The Striva-based
13 speaker product had a capacitive touch interface to mimic the features of the Striva headphones,
14 and also included a microphone for voice control. In addition, the Striva-based speaker had the
15 capability to be included in a distributed network as part of a precursor to the presently-understood
16 Internet of Things, such that the input devices (e.g., the microphone) could be used to control other
17 items in the distributed network (e.g., light switches). The speaker therefore allowed, for example,
18 a user to say “Striva, turn on the lights,” and the lights would turn on.

19 46. The Striva-based speaker product, referred to as the LS2, exists as a working
20 prototype:



47. Unfortunately, the economic reality of Koss's market position did not permit it to bring its Striva-based product vision to the masses. In particular, due to events abroad (and Koss's reliance on sales into those foreign countries), Koss's supply chain and customer base were thrown into upheaval in the late-2000's and early-2010's.

48. Moreover, Koss conducted market research during the mid-2000's, and concluded that given the market that was likely to develop for wireless headphones, larger companies with more manufacturing capability would become a substantial threat to bringing Striva fully to market. As a result, Koss invested substantially on part-purchasing, machinery, fabrication, and the like.

49. The circumstances above, and other circumstances outside of Koss's control, meant that the advanced features first developed for Striva were not able to be fully experienced by the majority of the purchasing public.

50. Koss brings the instant lawsuit because the industry has caught up to Koss's early-2000s vision: the technology Koss developed as part of its substantial Striva investment has become standardized, with whole listening ecosystems having been built around the techniques Koss conceived of over a decade ago.

51. More fundamentally, Koss is responsible for creating an entire headphone industry beginning from its release of the pioneering Stereophone as a ubiquitous way to consume information in 1958 has led to an entire headphone industry. Plantronics and others are reaping enormous benefits due to John C. Koss's vision, and Koss Corporation's commitment to that vision, for more than six decades.

52. Reflective of the industry's acknowledgement of Koss' substantial contributions in headphone technology, several headphone manufacturers have taken licenses to Koss' patents, rather than fighting with Koss in court.

53. One headphone manufacturer in particular approached Koss and took a license to Koss' patents without even having been sued for infringement of any Koss patent.

THE PATENTS-IN-SUIT

54. On February 12, 2019, U.S. Patent No. 10,206,025, entitled “System with Wireless Earphones,” was duly and legally issued by the United States Patent and Trademark Office. A true

1 and accurate copy of the '025 Patent is attached hereto as Exhibit A.

2 55. On November 5, 2019, U.S. Patent No. 10,469,934, entitled "System with Wireless
3 Earphones," was duly and legally issued by the United States Patent and Trademark Office. A true
4 and accurate copy of the '934 Patent is attached hereto as Exhibit B.

5 56. On December 10, 2019, U.S. Patent No. 10,506,325, entitled "System with Wireless
6 Earphones," was duly and legally issued by the United States Patent and Trademark Office. A true
7 and accurate copy of the '325 Patent is attached hereto as Exhibit C.

8 57. On August 25, 2020, U.S. Patent No. 10,757,498, entitled "System with Wireless
9 Earphones," was duly and legally issued by the United States Patent and Trademark Office. A true
10 and accurate copy of the '498 Patent is attached hereto as Exhibit D.

11 58. On November 24, 2020, U.S. Patent No. 10,848,852, entitled "System with Wireless
12 Earphones," was duly and legally issued by the United States Patent and Trademark Office. A true
13 and accurate copy of the '852 Patent is attached hereto as Exhibit E.

14 59. Collectively, the '025 Patent, the '934 Patent, the '325 Patent, the '498 Patent, and
15 the '852 Patent are referred to herein as the "Patents-in-Suit."

16 60. The Patents-in-Suit represent Koss's significant investment into the wireless
17 headphone and wearable technology space, including its commitment in the form of decades of
18 research and millions of dollars.

DEFENDANTS' KNOWLEDGE OF THE PATENTS-IN-SUIT

20 61. On July 10, 2020, Defendants were notified of their infringement of the '025 Patent,
21 the '934 Patent, and the '325 Patent by way of the letter attached hereto as Exhibit F.

22 62. On September 30, 2021, Defendants were notified of their infringement of the '498
23 Patent and the 852 Patent by way of the letter attached hereto as Exhibit G.

24 63. On October 1, 2021, Koss filed and served a First Amended Complaint asserting
25 each of the Patents-in-Suit against Defendants.

26 64. October 5, 2021, Koss served amended infringement contentions on Defendants
27 detailing why Defendants infringe each of the presently Patents-in-Suit.

65. The October 5, 2021 amended infringement contentions contain, among other charts, a chart mapping each of the claims of each of the Patents-in-Suit identified in this Second Amended Complaint.

66. On information and belief, Plantronics is aware of certain *inter partes* review proceedings that have occurred with regard to the Patents-in-Suit.

67. The statutory bar date for Plantronics to file further *inter partes* review petitions on the Patents-in-Suit has passed.

FIRST CAUSE OF ACTION

(Infringement of the '025 Patent)

68. Koss incorporates by reference and realleges each and every allegation of Paragraphs 1 through 67 as if set forth herein.

69. Koss owns all substantial rights, interest, and title in and to the '025 Patent, including the sole and exclusive right to prosecute this action and enforce the '025 Patent against infringers, and to collect damages for all relevant times.

70. The '025 Patent generally describes wireless earphones that comprise a transceiver circuit for receiving streaming audio from a data source, such as a digital audio player or a computer, over a wireless network. The '025 Patent also describes and claims how these wireless earphones use the claimed microphone to pick up utterances of a user and how, upon activation of a user-control of the headphone assembly, a request is initiated to a remote server. Various additional functional and hardware limitations are described and claimed in the dependent claims of the '025 Patent.

71. The written description of the '025 Patent describes in technical detail each of the limitations of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patentably distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.

72. The claims of the '025 Patent are directed to statutorily eligible subject matter, as they do not recite an abstract idea and are also directed to an inventive concept.

1 73. The Patent Trial and Appeal Board (the “PTAB” or “Board”) has already confirmed
 2 the patentability of the asserted claims of the ’025 Patent, and thus has already confirmed at least
 3 that they are directed to an inventive concept.

4 74. The ’025 Patent has been challenged at the PTAB in *inter partes* review on four (4)
 5 different occasions.

6 75. In particular, Apple Inc. (“Apple”) filed three (3) IPR petitions against the ’025
 7 Patent.

8 76. All three of Apple’s IPR petitions—IPR2021-00546, IPR2021-00626, and
 9 IPR2022-000053—were denied institution on the basis that Apple did not demonstrate a reasonable
 10 likelihood that one or more of the claims of the ’025 Patent was unpatentable.

11 77. Bose Corporation (“Bose”) filed one (1) IPR petition as to the ’025 Patent—
 12 IPR2021-00612.

13 78. In the Final Written Decision on Bose’s IPR, the PTAB found that certain claims of
 14 the ’025 Patent, including those claims identified in this Second Amended Complaint, are not
 15 unpatentable. The Final Written Decision is attached hereto as Exhibit H.

16 79. In particular, the Board held that “Claim 4 is representative” of the so-called “Signal
 17 Strength” claims.

18 80. In finding that the Signal Strength claims (including Claim 4) are not unpatentable,
 19 the Board found that “We are not persuaded by Petitioner’s arguments and evidence. Petitioner
 20 does not show that Harada [a prior art reference] teaches playing digital audio content received
 21 from multiple sources.”

22 81. The Board ultimately found that the Signal Strength claims (including Claim 4) are
 23 not unpatentable because “[t]his claimed feature is missing from the combination of Rezvani-446,
 24 Rezvani-875, and Skulley and is not found in Harada.”

25 82. Considering alternative arguments, the Board found that “even under a more
 26 generous reading of Petitioner’s combination, Harada still does not teach the transitioning that is
 27 missing from the combination of Rezvani-446, Rezvani-875, and Skulley.”

1 83. The Board ultimately found, therefore, that “[i]n sum, because Harada does not
 2 supply the limitation missing from Rezvani-446, Rezvani-875, and Skulley (either under the
 3 combination proposed in the Petition or the Dissent’s broader reading of that combination) and
 4 because Petitioner has not articulated a reason, with rational underpinning, to combine Rezvani-
 5 446, Rezvani-875, and Skulley with Harada, Petitioner has not proved, by a preponderance of the
 6 evidence, that Claims 4, 5, 7, 9, 14, 15, 17, 19, 23, 24, 26, and 28 would have been obvious over
 7 Rezvani-446, Rezvani-875, Skulley, and Harada.”

8 84. The only IPR filed against the ’025 Patent to both be instituted and reach final
 9 written decision thus concluded that certain claims, including Claim 4 (identified herein), are not
 10 unpatentable.

11 85. Plantronics has never filed an *inter partes* review Petition with regard to the ’025
 12 Patent.

13 86. Plantronics is statutorily estopped from filing *inter partes* review petitions with
 14 regard to the ’025 Patent, as it was served with an original complaint for patent infringement on the
 15 ’025 Patent more than one year ago.

16 87. The claims of the ’025 Patent were all prosecuted after the Supreme Court’s
 17 decision in *Alice Corp. v. CLS Bank Int’l.*, 578 U.S. 208 (2014), and were thus examined against
 18 the backdrop of the Supreme Court’s guidance.

19 88. The claims of the ’025 Patent were never rejected under 35 U.S.C. § 101.

20 89. In Koss’ now-resolved case with Apple, Apple did not present expert testimony
 21 about, and did not plan to present at trial, the theory that the claims of the ’025 Patent were directed
 22 to patent ineligible subject matter.

23 90. Claim 4 of the ’025 Patent depends from Claims 3, 2, 1 and recites as follows:

24 1. A system comprising:

25 a mobile, digital audio player that stores digital audio content; and
 26 a headphone assembly, separate from and in wireless communication with
 the mobile digital audio player, wherein the headphone assembly comprises:
 first and second earphones, wherein each of the first and second
 earphones comprises an acoustic transducer;
 an antenna for receiving wireless signals from the mobile, digital
 audio player via one or more ad hoc wireless communication links;

1 a wireless communication circuit connected to the at least one
 2 antenna, wherein the at least one wireless communication circuit is for
 3 receiving and transmitting wireless signals to and from the headphone
 4 assembly;

5 a processor;

6 a rechargeable battery for powering the headphone assembly; and

7 a microphone for picking up utterances by a user of the headphone
 8 assembly; and

9 a remote, network-connected server that is in wireless communication with
 10 the mobile, digital audio player;

11 wherein the mobile, digital audio player is for transmitting digital audio
 12 content to the headphone assembly via the one or more ad hoc wireless
 13 communication links, such that the digital audio content received by the headphone
 14 assembly from the mobile, digital audio player is playable by the first and second
 15 earphones; and

16 wherein the processor is for, upon activation of a user-control of the
 17 headphone assembly, initiating transmission of a request to the remote, network-
 18 connected server.

19 2. The system of claim 1, wherein:

20 in a first audio play mode, the first and second earphones play audio content
 21 stored on the mobile, digital audio player and transmitted to the headphone
 22 assembly from the mobile, digital audio player via the one or more ad hoc wireless
 23 communication links; and

24 in a second audio play mode, the earphones play audio content streamed
 25 from the remote, network-connected server.

26 3. The system of claim 2, wherein the processor of the headphone assembly
 27 is further for:

28 processing audible utterances by the user picked up by the microphone in
 29 response to activation of the microphone by the user; and

30 transmitting a communication based on the audible utterances via the one
 31 or more ad hoc wireless communication links.

32 4. The system of claim 3, wherein:

33 the mobile, digital audio player is a first digital audio source;

34 the system further comprises a second digital audio source that is different
 35 from the first digital audio source; and

36 the headphone assembly transitions to play digital audio content received
 37 wirelessly from the second digital audio source via a second wireless
 38 communication link based on, at least, a signal strength level for the second wireless
 39 communication link.

40 91. The inventions recited in Claim 4 address technological problems and provide
 41 technological solutions that were not well-understood, routine, or conventional at the time of the
 42 invention. This is demonstrated by (1) the initial issuance of the '025 Patent and (2) the Board's

1 confirmation, both through denial of certain petitions and through a final written decision, of the
2 patentability of Claim 4 of the '025 Patent.

3 92. A person of ordinary skill in the art reading the '025 Patent and its claims (including
4 claim 4) would understand that (a) the Asserted Patents' disclosures and claims are drawn to solving
5 specific, technical problems and (b) the claimed subject matter represents an advancement in the
6 technical field of the Asserted Patents. For example, as to both (a) and (b), the hardware and
7 software included in the recited headphone assembly of Claim 4 to transition from one source of
8 audio information to another source of audio information based, at least in part, on a determined
9 signal strength of a second wireless communication link (i.e., the link of the source of audio
10 information to which the headphone assembly is transitioning) contributes to solving the technical
11 problem that wireless headphone assemblies would be improved if they could account for the
12 situation where a user walks away from one device and near another device, both of which are
13 sources of audio content. The hardware for handling this situation, and permitting the headphone
14 assembly to transition to another source of information when appropriate, further contributes to
15 solving this technical problem. See, e.g., Exhibit A, '025 Patent at col. 10:4-45.

16 93. The claims of the '025 Patent do not preempt all techniques for or approaches to
17 accomplishing the same or a similar end to what they recite. For example, the claims do not preempt
18 the use of the techniques taught in the prior art cited on the face of the Asserted Patents, nor the art
19 cited in the various PTAB proceedings involving the '025 Patent, none of which, as the patent
20 examiners found, disclose or render obvious the claimed inventions, further showing that the claims
21 are not well-understood, routine, or conventional.

22 94. The claims of the '025 Patent do not merely recite the performance of some generic
23 computing technique. Instead, the '025 Patent claims recite one or more inventive concepts that
24 are rooted in headphone systems and audio technology, whose inventiveness has already been
25 confirmed by the PTAB's final written decision and by various parties' failure to even secure
26 institution of IPRs. Specifically, the '025 Patent addresses and provides a solution to a long-
27 standing problem in the area of wireless headphone technology: the problem presented by the fact
28

1 that a wireless headphone user can simply walk away, and distance himself or herself from, the
 2 source of the wireless data being played back in the headphones.

3 95. With the inventive concepts recited in at least the claims the PTAB has already
 4 confirmed are patentable, systems involving wireless headphone assemblies can now seamlessly
 5 address the problem that a user may walk away from one source of audio information and toward
 6 another source of audio information. A person of ordinary skill in the art would thus understand
 7 that the claims of the Asserted Patents are directed to specific improvements in headphone
 8 assemblies and similar systems.

9 96. Nor can it be said that the major difference between the prior art and Koss's claimed
 10 invention in Claim 4 of the '025 Patent is wireless, with the attendant benefits that such a system
 11 provides. Indeed, Claim 4 of the '025 Patent demonstrates a technological improvement, and not
 12 simply a feature of wireless communication; the PTAB has confirmed this to be the case. And the
 13 PTAB's analysis confirms that the system recited in Claim 4 of the '025 Patent is not "well
 14 understood."

15 97. Moreover, Claim 4 of the '025 Patent recites physical components that improve the
 16 technology of wireless communication. The Board has confirmed that prior systems did not have
 17 the hardware and software required to perform the "signal strength" aspects of Claim 4, and thus
 18 confirmed that these features indeed improve the technology of wireless communication.

19 98. The asserted claims of the '025 Patent are not directed to wireless communication
 20 over a network generally, but rather are limited to a particular application of wireless
 21 communication over a network, in that they are limited to "earphones" with a processor that, "upon
 22 activation of a user-control ..., initiate[s] transmission of a request to a remote, network-connected
 23 server," and that transition from playing digital audio contend received wireless from a first digital
 24 audio source received via a first wireless communication link to playing digital audio contend
 25 received wireless from a second digital audio source received via a second wireless communication
 26 link, based on the signal strength for the second wireless communication link.

27 99. A third party could communicate wirelessly over a network without practicing the
 28 asserted claims of the '025 Patent, such as by not using "earphones" for the wireless communication

1 over the network, not using a processor that, “upon activation of a user-control ..., initiate[s]
 2 transmission of a request to a remote, network-connected server” for the wireless communication
 3 over the network, and/or that do not transition from playing digital audio contend received wireless
 4 from a first digital audio source received via a first wireless communication link to playing digital
 5 audio contend received wireless from a second digital audio source received via a second wireless
 6 communication link, based on the signal strength for the second wireless communication link.

7 100. In addition to wireless communication elements, the asserted claims of the '025
 8 Patent recite components that transform one form of energy to another form of energy. The asserted
 9 claims of the '025 Patent recite that the claimed headphone assembly comprises both acoustic
 10 transducers and a microphone. In this context, an acoustic transducer converts an electrical signal
 11 to mechanical energy (i.e., sound waves), such as by vibrating a membrane in the acoustic
 12 transducer. A microphone converts mechanical energy (i.e., sound waves) to an electrical signal
 13 based on vibrations of a membrane of the microphone caused by the sound waves.

14 101. Claim 4 of the '025 Patent is therefore not directed to an abstract idea, and is patent
 15 eligible subject matter pursuant to *Alice*, step 1.

16 102. What is more, Claim 4 of the '025 Patent is an inventive concept at least because
 17 the combination of claim limitations was not well-understood, routine, or conventional. In
 18 particular, despite repeated challenges at the PTAB, the Board has consistently found (in denial of
 19 institution and in a final written decision) that Claim 4 is directed to an inventive concept.

20 103. These statements of inventiveness are not conclusory; quite to the contrary, some of
 21 the largest headphone manufacturers in the world mustered the strength of some of the most
 22 sophisticated lawyers and experts in the world and, in the one (of four) IPR petitions to reach final
 23 written decision, the PTAB nevertheless found that Claim 4 (among others) is directed to an
 24 inventive concept.

25 104. Thus, in the event *Alice*'s step 2 is reached, Claim 4 of the '025 Patent recites an
 26 inventive concept and demonstrates that that claim is directed to patent eligible subject matter.

27 105. Further confirming that the '025 Patent is directed to patent eligible subject matter,
 28 the examiner in a family member application recently issued a notice of allowance for a similar set

1 of claims to Claim 4 of the '025 Patent in view of considering this Court's Dkt. 88 Order dismissing
 2 Koss' First Amended Complaint.

3 106. In particular, Koss submitted this Court's Dkt. 88 Order in an IDS during
 4 examination of U.S. Application Serial No. 17/812,911, which is in the same patent family as the
 5 '025 Patent and which claims priority through several continuation applications to the '025 Patent.

6 107. The Examiner issued a "Corrected Notice of Allowance" on November 30, 2022
 7 (Exhibit J) in which he stated that "[t]he Office carefully review [sic] IDS (Koss Corp V.
 8 Plantronics Inc) filed on 11/21/2022 Order Granting Motion Dismiss" and nevertheless allowed the
 9 pending claims.

10 108. This confirms that the Office, which issued the '025 Patent in view of the Supreme
 11 Court's *Alice* ruling without rejecting the claims under that ruling (or under 35 U.S.C. § 101 at all)
 12 views the subject matter of Koss' patent portfolio as being directed to patent eligible subject matter.

13 109. There is no reason to disturb the presumption of validity under 35 U.S.C. § 101 that
 14 the '025 Patent (and any issued patent) enjoys.

15 110. Plantronics has made, had made, used, imported, supplied, distributed, sold, and/or
 16 offered for sale products and/or systems, including systems in which its BackBeat-branded products
 17 and/or systems, including, but not limited to, the BackBeat Fit 2100 Headphones, are incorporated
 18 ("Accused '025 Headphones").

19 111. As set forth in the attached non-limiting claim chart (Exhibit I), Plantronics has
 20 infringed and is infringing at least Claim 4 of the '025 Patent by making, having made, using,
 21 importing, supplying, distributing, selling, and/or offering for sale the Accused '025 Headphones,
 22 with specific reference in the claim chart to the BackBeat Fit 2100 Product. In particular, the use
 23 of the Accused '025 Headphones by Plantronics to, for example, demonstrate those products in
 24 brick-and-mortar stores in the San Francisco Bay Area, California or to, for example, test those
 25 products, constitute acts of direct infringement of Claim 4 of the '025 Patent.

26 112. Plantronics actively induces infringement of at least Claim 4 of the '025 Patent by
 27 selling the Accused '025 Headphones with instructions as to how to use the Accused
 28 '025Headphones in a system such as that recited in the '025 Patent. Plantronics aids, instructs, or

1 otherwise acts with the intent to cause an end user to use the Accused '025 Headphones in an
 2 infringing manner. Plantronics knew of the '025 Patent and knew that its use and sale of the
 3 Accused '025 Headphones infringe at least Claim 4 of the '025 Patent. When a customer of
 4 Plantronics uses the Accused '025 Headphones as specifically instructed by Plantronics, the
 5 customer uses the headphones in a manner that completes the system of Claim 4, thereby infringing
 6 Claim 4 of the '025 Patent.

7 113. Plantronics is also liable for contributory infringement of at least Claim 4 of the '025
 8 Patent by providing, and by having knowingly provided, a material part of the instrumentalities,
 9 namely the Accused '025 Headphones, used to infringe Claim 4 of the '025 Patent. The Accused
 10 '025 Headphones have no substantial non-infringing uses. When an end user uses the Accused
 11 '025 Headphones in combination with, for example, a smart phone such as, for example, an
 12 Android-based smart phone and/or a peripheral device such as, for example, an Android-based
 13 tablet, the end user directly infringes Claim 4 of the '025 Patent. Plantronics knew that the Accused
 14 '025 Headphones were especially made for use in an infringing manner prior to the filing of this
 15 lawsuit. For at least the reasons set forth above, Plantronics contributes to the infringement of the
 16 '025 Patent by others.

17 114. Koss has been damaged as a result of the infringing conduct by Plantronics alleged
 18 above. Thus, Plantronics is liable to Koss in an amount that compensates it for such infringement,
 19 which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by
 20 this Court under 35 U.S.C. § 284.

21 115. Plantronics's infringement of the '025 Patent has caused, and will continue to cause,
 22 Koss to suffer substantial and irreparable harm.

23 116. Plantronics has been aware that it infringes the '025 Patent since at least July 10,
 24 2020, upon the receipt of the letter attached as Exhibit F. Since obtaining knowledge of its
 25 infringing activities, Plantronics has failed to cease its infringing activities. Further, Plantronics
 26 has continued its infringing activities, disregarding Koss's patent rights, since the filing of the
 27 original complaint on July 22, 2020.
 28

117. Plantronics's infringement of the '025 Patent is, has been, and continues to be, willful, intentional, deliberate, and/or in conscious disregard of Koss's rights under the patent.

118. Koss has complied with 35 U.S.C. § 287 with respect to the '025 Patent.

SECOND CAUSE OF ACTION

(Infringement of the '934 Patent)

119. Koss incorporates by reference and realleges each and every allegation of Paragraphs 1 through 118 as if set forth herein.

120. Koss owns all substantial rights, interest, and title in and to the '934 Patent, including the sole and exclusive right to prosecute this action and enforce the '934 Patent against infringers, and to collect damages for all relevant times.

121. The '934 Patent generally describes wireless earphones that comprise a transceiver circuit for receiving streaming audio from a data source, such as a digital audio player or a computer, over a wireless network. The '934 Patent also describes and claims how these wireless earphones use the claimed microphone to pick up utterances of a user and how, upon activation of a user-control of the headphone assembly, a request is initiated to a remote server. It further describes and claims the receipt and storage of firmware upgrades. Various additional functional and hardware limitations are described and claimed in the dependent claims of the '934 Patent.

122. The written description of the '934 Patent describes in technical detail each of the limitations of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patentably distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.

123. The claims of the '934 Patent are directed to statutorily eligible subject matter, as they do not recite an abstract idea and are also directed to an inventive concept.

124. The PTAB has already confirmed the patentability of the asserted claims of the '934 Patent, and thus has already confirmed at least that they are directed to an inventive concept.

125. The '934 Patent has been challenged at the PTAB in *inter partes* review on four (4) different occasions.

1 126. In particular, Apple filed three (3) IPR petitions against the '934 Patent.

2 127. Two of Apple's IPR petitions—IPR2021-00693 and IPR2022-00168—were denied
3 institution.

4 128. One of Apple's IPR petitions—IPR2021-592—was instituted, but dismissed prior
5 to a final written decision by agreement of the parties.

6 129. Bose filed one (1) IPR petition as to the '934 Patent—IPR2021-00680.

7 130. In the Final Written Decision on Bose's IPR, the PTAB found that certain claims of
8 the '934 Patent, including those claims identified in this Amended Complaint, are not unpatentable.
9 The Final Written Decision is attached hereto as Exhibit K.

10 131. In particular, the Board held that "Claim 4 is representative" of the so-called "Signal
11 Strength" claims.

12 132. In finding that the Signal Strength claims (including Claim 4) are not unpatentable,
13 the Board found that "We are not persuaded by Petitioner's arguments and evidence. Petitioner
14 does not show that Harada [a prior art reference] teaches playing digital audio content received
15 from multiple sources."

16 133. The Board ultimately found that the Signal Strength claims (including Claim 4) are
17 not unpatentable because "This claimed feature is missing from the Schrager-Goldstein
18 combination and is not found in Harada."

19 134. Considering alternative arguments, the Board found that "even under a more
20 generous reading of Petitioner's combination, Harada still does not teach the transitioning that is
21 missing from the combination of Goldstein and Schrager."

22 135. The Board ultimately found, therefore, that "[i]n sum, because Harada does not
23 supply the limitation missing from Goldstein and Schrager (either under the combination proposed
24 in the Petition or the Dissent's broader reading of that combination) and because Petitioner has not
25 articulated a reason, with rational underpinning, to combine Goldstein and Schrager with Harada,
26 Petitioner has not proved, by a preponderance of the evidence, that Claims 4, 6, 8, 12, 13, 38, 40,
27 41, and 58–62 would have been obvious over Goldstein, Schrager, and Harada, or that Claims 17,
28 18, 20, and 22 would have been obvious over Goldstein, Schrager, Skulley, and Harada."

1 136. The only IPR filed against the '934 Patent to both be instituted and reach final
 2 written decision thus concluded that certain claims, including Claim 4 (identified herein), are not
 3 unpatentable.

4 137. Plantronics has never filed an *inter partes* review Petition with regard to the '934
 5 Patent.

6 138. Plantronics is statutorily estopped from filing *inter partes* review petitions with
 7 regard to the '934 Patent, as it was served with an original complaint for patent infringement on the
 8 '934 Patent more than one year ago.

9 139. The claims of the '934 Patent were all prosecuted after the Supreme Court's
 10 decision in *Alice Corp. v. CLS Bank Int'l.*, 578 U.S. 208 (2014), and were thus examined against
 11 the backdrop of the Supreme Court's guidance.

12 140. The claims of the '934 Patent were never rejected under 35 U.S.C. § 101.

13 141. In Koss' now-resolved case with Apple, Apple did not present expert testimony
 14 about, and did not plan to present at trial, the theory that the claims of the '934 Patent were directed
 15 to patent ineligible subject matter.

16 142. Claim 4 of the '934 Patent depends from Claims 3, 2, 1 and recites as follows:

17 1. A headphone assembly comprising:

18 first and second earphones, wherein each of the first and second earphones
 comprises an acoustic transducer; and

19 an antenna for receiving wireless signals from a mobile, digital audio player
 via one or more ad hoc wireless communication links;

20 a wireless communication circuit connected to the antenna, wherein the
 wireless communication circuit is for receiving and transmitting wireless signals to
 and from the headphone assembly;

21 a processor;

22 a memory for storing firmware that is executed by the processor;

23 a rechargeable battery for powering the headphone assembly; and

24 a microphone for picking up utterances by a user of the headphone
 assembly; and

25 wherein the headphone assembly is configured to play, by the first and
 second earphones, digital audio content transmitted by the mobile, digital audio
 player via the one or more ad hoc wireless communication links;

26 wherein the processor is configured to, upon activation of a user-control of
 the headphone assembly, initiate transmission of a request to a remote, network-
 connected server that is in wireless communication with the mobile, digital audio

1 player; and wherein the headphone assembly is for receiving firmware upgrades
 2 transmitted from the remote, network-connected server.

3 2. The headphone assembly of claim 1, wherein:

4 in a first audio play mode, the first and second earphones play audio content
 5 stored on a mobile, digital audio player and transmitted to the headphone assembly
 6 from the mobile, digital audio player via the one or more ad hoc wireless
 7 communication links; and

8 in a second audio play mode, the earphones play audio content streamed
 9 from the remote, network-connected server.

10 3. The headphone assembly of claim 2, wherein the processor is for:

11 processing audible utterances by the user picked up by the microphone in
 12 response to activation of the microphone by the user; and

13 transmitting a communication based on the audible utterances via the one
 14 or more ad hoc wireless communication links.

15 4. The headphone assembly of claim 3, wherein:

16 the mobile, digital audio player is a first digital audio source;

17 the headphone assembly transitions to play digital audio content received
 18 wirelessly from a second digital audio source via a second wireless communication
 19 link based on, at least, a signal strength level for the second wireless communication
 20 link, wherein the second digital audio source is different from the first digital audio
 21 source.

22 143. The inventions recited in Claim 4 address technological problems and provide
 23 technological solutions that were not well-understood, routine, or conventional at the time of the
 24 invention. This is demonstrated by (1) the initial issuance of the '934 Patent and (2) the Board's
 25 confirmation, both through denial of certain petitions and through a final written decision, of the
 26 patentability of Claim 4 of the '934 Patent.

27 144. In particular, the inventions recited in Claim 4 address the following technological
 28 problems and provide technological solutions that were not well understood, routine, or
 29 conventional at the time of the invention:

- 30 a. First and second audio play modes whereby the source of audio varies from one
 31 mode to the other
- 32 b. Detecting, processing, and reacting to audible utterances by the user
- 33 c. Transitioning to play digital audio content from a second digital audio source based
 34 on at least a signal strength level of a second wireless communication link

1 145. At least these features confine the claim to a series of particular solutions to a series
 2 of identified problems.

3 146. The physical components required to perform these technical innovations (e.g., a
 4 microphone to detect audible utterances) are the focus of the '934 Patent and in particular asserted
 5 claim 4.

6 147. These features, which drove the PTAB to find that Claim 4 is not unpatentable,
 7 demonstrate some of the differences between the claim and the prior art, and demonstrate that it is
 8 not true that "the major difference between the prior art and Koss's claimed invention is that the
 9 claimed invention is wireless..."

10 148. A person of ordinary skill in the art reading the '934 Patent and its claims (including
 11 Claim 4) would understand that (a) the Asserted Patents' disclosures and claims are drawn to
 12 solving specific, technical problems and (b) the claimed subject matter represents an advancement
 13 in the technical field of the Asserted Patents. For example, as to both (a) and (b), the hardware and
 14 software included in the recited headphone assembly of Claim 4 to transition from one source of
 15 audio information to another source of audio information based, at least in part, on a determined
 16 signal strength of a second wireless communication link (i.e., the link of the source of audio
 17 information to which the headphone assembly is transitioning) contributes to solving the technical
 18 problem that wireless headphone assemblies would be improved if they could account for the
 19 situation where a user walks away from one device and near another device, both of which are
 20 sources of audio content. The hardware for handling this situation, and permitting the headphone
 21 assembly to transition to another source of information when appropriate, further contributes to
 22 solving this technical problem. See, e.g., Exhibit B, '934 Patent at col. 10:7-48.

23 149. The claims of the '934 Patent do not preempt all techniques for or approaches to
 24 accomplishing the same or a similar end to what they recite. For example, the claims do not preempt
 25 the use of the techniques taught in the prior art cited on the face of the Asserted Patents, nor the art
 26 cited in the various PTAB proceedings regarding the '934 Patent, none of which, as the patent
 27 examiners found, disclose or render obvious the claimed inventions, further showing that the claims
 28 are not well-understood, routine, or conventional.

1 150. The claims of the '934 Patent do not merely recite the performance of some generic
 2 computing technique. Instead, the '934 Patent claims recite one or more inventive concepts that
 3 are rooted in headphone systems and audio technology, whose inventiveness has already been
 4 confirmed by the PTAB's final written decision and by various parties' failure to even secure
 5 institution of IPRs. Specifically, the '934 Patent addresses and provides a solution to a long-
 6 standing problem in the area of wireless headphone technology: the problem presented by the fact
 7 that a wireless headphone user can simply walk away, and distance himself or herself from, the
 8 source of the wireless data being played back in the headphones.

9 151. With the inventive concepts recited in at least the claims the PTAB has already
 10 confirmed are patentable, systems involving wireless headphone assemblies can now seamlessly
 11 address the problem that a user may walk away from one source of audio information and toward
 12 another source of audio information. A person of ordinary skill in the art would thus understand
 13 that the claims of the Asserted Patents are directed to specific improvements in headphone
 14 assemblies and similar systems.

15 152. Nor can it be said that the major difference between the prior art and Koss's claimed
 16 invention in Claim 4 of the '934 Patent is wireless, with the attendant benefits that such a system
 17 provides. Indeed, Claim 4 of the '934 Patent demonstrates a technological improvement, and not
 18 simply a feature of wireless communication; the PTAB has confirmed this to be the case. And the
 19 PTAB's analysis confirms that the system recited in Claim 4 of the '934 Patent is not "well
 20 understood."

21 153. Moreover, Claim 4 of the '934 Patent recites physical components that improve the
 22 technology of wireless communication. The Board has confirmed that prior systems did not have
 23 the hardware and software required to perform the "signal strength" aspects of Claim 4, and thus
 24 confirmed that these features indeed improve the technology of wireless communication.

25 154. The asserted claims of the '934 Patent are not directed to wireless communication
 26 over a network generally, but rather are limited to a particular application of wireless
 27 communication over a network, in that they are limited to "earphones" with a processor that, "upon
 28 activation of a user-control ..., initiate[s] transmission of a request to a remote, network-connected

1 server,” that are for “receiving firmware upgrades transmitted from the emote, network-connected
 2 server,” and that transition from playing digital audio contend received wireless from a first digital
 3 audio source received via a first wireless communication link to playing digital audio contend
 4 received wireless from a second digital audio source received via a second wireless communication
 5 link, based on the signal strength for the second wireless communication link.

6 155. A third party could communicate wirelessly over a network without practicing the
 7 asserted claims of the ’934 Patent, such as by not using “earphones” for the wireless communication
 8 over the network, not using a processor that, “upon activation of a user-control ..., initiate[s]
 9 transmission of a request to a remote, network-connected server” for the wireless communication
 10 over the network, that do not “receiv[e] firmware upgrades transmitted from the emote, network-
 11 connected server,” and/or that do not transition from playing digital audio contend received wireless
 12 from a first digital audio source received via a first wireless communication link to playing digital
 13 audio contend received wireless from a second digital audio source received via a second wireless
 14 communication link, based on the signal strength for the second wireless communication link.

15 156. In addition to the wireless communication elements, the asserted claims of the ’934
 16 Patent recite components that transform one form of energy to another form of energy. The asserted
 17 claims of the ’934 Patent recite that the claimed headphone assembly comprises both acoustic
 18 transducers and a microphone. In this context, an acoustic transducer converts an electrical signal
 19 to mechanical energy (i.e., sound waves), such as by vibrating a membrane in the acoustic
 20 transducer. A microphone converts mechanical energy (i.e., sound waves) to an electrical signal
 21 based on vibrations of a membrane of the microphone caused by the sound waves.

22 157. Claim 4 of the ’934 Patent is therefore not directed to an abstract idea, and is patent
 23 eligible subject matter pursuant to *Alice*, step 1.

24 158. What is more, Claim 4 of the ’934 Patent is an inventive concept at least because
 25 the combination of claim limitations was not well-understood, routine, or conventional. In
 26 particular, despite repeated challenges at the PTAB, the Board has consistently found (in denial of
 27 institution and in a final written decision) that Claim 4 is directed to an inventive concept.
 28

1 159. These statements of inventiveness are not conclusory; quite to the contrary, some of
 2 the largest headphone manufacturers in the world mustered the strength of some of the most
 3 sophisticated lawyers and experts in the world and, in the one (of four) IPR petitions to reach final
 4 written decision, the PTAB nevertheless found that Claim 4 (among others) is directed to an
 5 inventive concept.

6 160. Thus, in the event *Alice*'s step 2 is reached, Claim 4 of the '934 Patent recites an
 7 inventive concept and demonstrates that that claim is directed to patent eligible subject matter.

8 161. Further confirming that the '934 Patent is directed to patent eligible subject matter,
 9 the examiner in a family member application recently issued a notice of allowance for a similar set
 10 of claims to Claim 4 of the '934 Patent in view of considering this Court's Dkt. 88 Order dismissing
 11 Koss' First Amended Complaint.

12 162. In particular, Koss submitted this Court's Dkt. 88 Order in an IDS during
 13 examination of U.S. Application Serial No. 17/812,911, which is in the same patent family as the
 14 '934 Patent and which claims priority through several continuation applications to the '934 Patent.

15 163. The Examiner issued a "Corrected Notice of Allowance" on November 30, 2022
 16 (Exhibit J) in which he stated that "[t]he Office carefully review [sic] IDS (Koss Corp V.
 17 Plantronics Inc) filed on 11/21/2022 Order Granting Motion Dismiss" and nevertheless allowed the
 18 pending claims.

19 164. This confirms that the Office, which issued the '934 Patent in view of the Supreme
 20 Court's *Alice* ruling without rejecting the claims, under that ruling (or under 35 U.S.C. § 101 at all)
 21 views the subject matter of Koss' patent portfolio as being directed to patent eligible subject matter.

22 165. There is no reason to disturb the presumption of validity under 35 U.S.C. § 101 that
 23 the '934 Patent (and any issued patent) enjoys.

24 166. Plantronics has made, had made, used, imported, supplied, distributed, sold, and/or
 25 offered for sale products and/or systems, including systems in which its BackBeat-branded products
 26 and/or systems, including, but not limited to, the BackBeat Fit 300 Headphones are incorporated
 27 ("Accused '934 Headphones").

28

1 167. As set forth in the attached non-limiting claim chart (Exhibit L), Plantronics has
 2 infringed and is infringing at least Claim 4 of the '934 Patent by making, having made, using,
 3 importing, supplying, distributing, selling, and/or offering for sale the Accused '934 Headphones,
 4 with specific reference in the claim chart to the BackBeat Fit 300 product. In particular, the use of
 5 the Accused '934 Headphones by Plantronics to, for example, demonstrate those products in brick-
 6 and-mortar stores in San Francisco Bay Area, California or to, for example, test those products,
 7 constitute acts of direct infringement of Claim 4 of the '934 Patent.

8 168. Plantronics actively induces infringement of at least Claim 4 of the '934 Patent by
 9 selling the Accused '934 Headphones with instructions as to how to use the Accused '934
 10 Headphones in a system such as that recited in the '934 Patent. Plantronics aids, instructs, or
 11 otherwise acts with the intent to cause an end user to use the Accused '934 Headphones in an
 12 infringing manner. Plantronics knew of the '934 Patent and knew that its use and sale of the
 13 Accused '934 Headphones infringe at least Claim 4 of the '934 Patent. When a customer of
 14 Plantronics uses the Accused '934 Headphones as specifically instructed by Plantronics, the
 15 customer uses the headphones in a manner that infringes at least Claim 4 of the '934 Patent.

16 169. Plantronics is also liable for contributory infringement of at least Claim 4 of the '934
 17 Patent by providing, and by having knowingly provided, a material part of the instrumentalities,
 18 namely the Accused '934 Headphones, used to infringe Claim 4 of the '934 Patent. The Accused
 19 '934 Headphones have no substantial non-infringing uses. When an end user uses the Accused '934
 20 Headphones in combination with, for example, a smart phone such as, for example, an Android-
 21 based smart phone and/or a peripheral device such as, for example, an Android-based tablet, the
 22 end user directly infringes Claim 4 of the '934 Patent. Plantronics knew that the Accused '934
 23 Headphones were especially made for use in an infringing manner prior to the filing of this lawsuit.
 24 For at least the reasons set forth above, Plantronics contributes to the infringement of the '934
 25 Patent by others.

26 170. Koss has been damaged as a result of the infringing conduct by Plantronics alleged
 27 above. Thus, Plantronics is liable to Koss in an amount that compensates it for such infringement,
 28

1 which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by
 2 this Court under 35 U.S.C. § 284.

3 171. Plantronics's infringement of the '934 Patent has caused, and will continue to cause,
 4 Koss to suffer substantial and irreparable harm.

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 6 2020, upon the receipt of the letter attached as Exhibit F. Since obtaining knowledge of its
 7 infringing activities, Plantronics has failed to cease its infringing activities. Further, Plantronics
 8 has continued its infringing activities, disregarding Koss's patent rights, since the filing of the
 9 original complaint on July 22, 2020.

10 173. Plantronics's infringement of the '934 Patent is, has been, and continues to be,
 11 willful, intentional, deliberate, and/or in conscious disregard of Koss's rights under the patent.

12 174. Koss has complied with 35 U.S.C. § 287 with respect to the '934 Patent.

THIRD CAUSE OF ACTION

(Infringement of the '325 Patent)

15 175. Koss incorporates by reference and realleges each and every allegation of
 16 Paragraphs 1 through 174 as if set forth herein.

17 176. Koss owns all substantial rights, interest, and title in and to the '325 Patent,
 18 including the sole and exclusive right to prosecute this action and enforce the '325 Patent against
 19 infringers, and to collect damages for all relevant times.

20 177. The '325 Patent generally describes wireless earphones that comprise a transceiver
 21 circuit for receiving streaming audio from a data source, such as a digital audio player or a
 22 computer, over a wireless network. The '325 Patent also describes and claims how these wireless
 23 earphones use the claimed microphone to pick up utterances of a user and specific limitations as to
 24 the curved hanger bar with a portion that rests upon the user's ear. It further describes and claims
 25 a docking station for charging the earphones. Various additional functional and hardware
 26 limitations are described and claimed in the dependent claims of the '325 Patent. Importantly,
 27 Claim 18 of the '325 Patent describes and claims a digital signal processor and a baseband processor
 28 to further improve the headphone assemblies over the prior art.

1 178. The written description of the '325 Patent describes in technical detail each of the
 2 limitations of the claims, allowing a skilled artisan to understand the scope of the claims and how
 3 the non-conventional and non-generic combination of claim limitations is patentably distinct from
 4 and improved upon what may have been considered conventional or generic in the art at the time
 5 of the invention.

6 179. The claims of the '325 Patent are directed to statutorily eligible subject matter, as
 7 they do not recite an abstract idea and are also directed to an inventive concept.

8 180. The PTAB has already confirmed the patentability of the asserted claims of the '325
 9 Patent, and thus has already confirmed at least that they are directed to an inventive concept.

10 181. The '325 Patent has been challenged at the PTAB in *inter partes* review on two (2)
 11 different occasions.

12 182. In particular, Apple filed two (2) IPR Petitions against the '325 Patent.

13 183. One of Apple's IPR petitions—IPR2021-00579—was denied institution.

14 184. One of Apple's IPR petitions—IPR2021-00305—was instituted, and resulted in a
 15 final written decision that at least Claim 18 of the '325 Patent was not unpatentable. The Final
 16 Written Decision is attached hereto as Exhibit M.

17 185. In particular, the Board held that “Petitioner has not shown, by a preponderance of
 18 the evidence, that the combination of Rosener and Huddart teaches ‘wherein the processor circuit
 19 of each of the first and second earphones comprises: a digital signal processor that provides a sound
 20 quality enhancement for the audio content played by the at least one acoustic transducers of the
 21 earphone,’ as recited in claim 18.”

22 186. The only IPR filed against the '325 Patent to both be instituted and reach final
 23 written decision thus concluded that Claim 18 is not unpatentable.

24 187. There will be no appeal of the Board's finding that Claim 18 is not unpatentable, as
 25 Apple and Koss have resolved their disputes.

26 188. Plantronics has never filed an *inter partes* review Petition with regard to the '325
 27 Patent.

1 189. Plantronics is statutorily estopped from filing *inter partes* review petitions with
 2 regard to the '325 Patent, as it was served with an original complaint for patent infringement on the
 3 '325 Patent more than one year ago.

4 190. The claims of the '325 Patent were all prosecuted after the Supreme Court's
 5 decision in *Alice Corp. v. CLS Bank Int'l.*, 578 U.S. 208 (2014), and were thus examined against
 6 the backdrop of the Supreme Court's guidance.

7 191. The claims of the '325 Patent were never rejected under 35 U.S.C. § 101.

8 192. Claim 18 of the '325 Patent depends from Claim 1 and recites as follows:

9 1. Headphones comprising:

10 a pair of first and second wireless earphones to be worn simultaneously by
 a user, wherein the first and second earphones are separate such that when the
 headphones are worn by the user, the first and second earphones are not physically
 connected, wherein each of the first and second earphones comprises:

11 a body portion;

12 an earbud extending from the body portion that is inserted into an
 ear of the user when worn by the user;

13 a curved hanger bar connected to the body portion, wherein the
 curved hanger bar comprises a portion that rests upon an upper external
 curvature of an ear of the user behind an upper portion of an auricula of the
 ear of the user;

14 a wireless communication circuit for receiving and transmitting
 wireless signals;

15 a processor circuit connected to the wireless communication circuit;

16 at least one acoustic transducer for producing audible sound from
 the earbud;

17 a microphone for picking up utterances of a user of the headphones;

18 an antenna connected to the wireless communication circuit; and

19 a rechargeable power source; and

20 a docking station for holding at least the first wireless earphone, wherein
 the docking station comprises a power cable for connecting to an external
 device to power the docking station, and wherein the docking station is for
 charging at least the first wireless earphone when the first wireless earphone
 is placed in the docking station.

21 18. The headphones of claim 1, wherein the processor circuit of each of the
 22 first and second earphones comprises:

23 a digital signal processor that provides a sound quality enhancement for the
 audio content played by the at least one acoustic transducers of the earphone; and

24 a baseband processor circuit that is in communication with the wireless
 communication circuit of the earphone.

1 193. The inventions recited in Claim 18 address technological problems and provide
 2 technological solutions that were not well-understood, routine, or conventional at the time of the
 3 invention. This is demonstrated by (1) the initial issuance of the '325 Patent and (2) the Board's
 4 confirmation, both through denial of one petition and through a final written decision, of the
 5 patentability of claim 18 of the '325 Patent.

6 194. In particular, the inventions recited in Claim 18 address the following technological
 7 problems and provide technological solutions that were not well understood, routine, or
 8 conventional at the time of the invention:

- 9 a. A digital signal processor that provides a sound quality enhancement for audio
 10 content played back through the earphones and
- 11 b. A baseband processor in communication with the wireless circuit.

12 195. At least these features confine the claim to a series of particular solutions to a series
 13 of identified problems.

14 196. The physical components required to perform these technical innovations (e.g., a
 15 digital signal processor and a baseband circuit) are the focus of Claim 18 of the '325 Patent.

16 197. These features, which drove the PTAB to find that Claim 18 is not unpatentable,
 17 demonstrate some of the differences between the claim and the prior art, and demonstrate that it is
 18 not true that "the major difference between the prior art and Koss's claimed invention is that the
 19 claimed invention is wireless..."

20 198. A person of ordinary skill in the art reading the '325 Patent and its claims (including
 21 claim 18) would understand that (a) the Asserted Patents' disclosures and claims are drawn to
 22 solving specific, technical problems and (b) the claimed subject matter represents an advancement
 23 in the technical field of the Asserted Patents. For example, as to both (a) and (b), the hardware and
 24 software included in the recited headphone assembly of Claim 18 to provide sound quality
 25 enhancements with certain digital signal processors and to implement a saleable headphone
 26 assembly using a baseband processor contributes to solving the technical problem of how to make
 27 a relatively small wireless device sound good and provide adequate battery life. The hardware for
 28

1 handling this situation, and recited specifically in Claim 18, contributes to the solution of this
 2 technical problem.

3 199. The claims of the '325 Patent do not preempt all techniques for or approaches to
 4 accomplishing the same or a similar end to what they recite. For example, the claims do not preempt
 5 the use of the techniques taught in the prior art cited on the face of the Asserted Patents, nor the art
 6 cited in the various PTAB proceedings regarding the '325 Patent, none of which, as the patent
 7 examiners found, disclose or render obvious the claimed inventions, further showing that the claims
 8 are not well-understood, routine, or conventional.

9 200. The claims of the '325 Patent do not merely recite the performance of some generic
 10 computing technique. Instead, the '325 Patent claims recite one or more inventive concepts that
 11 are rooted in headphone systems and audio technology, whose inventiveness has already been
 12 confirmed by the PTAB's final written decision and by various parties' failure to even secure
 13 institution of IPRs. Specifically, the '325 Patent addresses and provides a solution to a long-
 14 standing problem in the area of wireless headphone technology: the problem of providing
 15 acceptable quality audio in a battery operated device for an acceptable amount of time between
 16 charging.

17 201. With the inventive concepts recited in at least the claims the PTAB has already
 18 confirmed are patentable, systems involving wireless headphone assemblies can now seamlessly
 19 address the problem of low quality audio in a device with short battery life. A person of ordinary
 20 skill in the art would thus understand that the claims of the Asserted Patents are directed to specific
 21 improvements in headphone assemblies and similar systems.

22 202. Nor can it be said that the major difference between the prior art and Koss's claimed
 23 invention in Claim 18 of the '325 Patent is focused on the wireless capability, and not any of the
 24 recited physical components in the claim. Indeed, Claim 18 of the '325 Patent demonstrates a
 25 technological improvement, and not simply a feature of wireless communication; the PTAB has
 26 confirmed this to be the case. And the PTAB's analysis confirms that the system recited in Claim
 27 18 of the '325 Patent merely contains "generic physical elements of the prior art."

28

1 203. Moreover, Claim 18 of the '325 Patent recites physical components that improve
 2 the technology of wireless headphones. The Board has confirmed that prior systems did not have
 3 the hardware and software required by Claim 18, and thus confirmed that these features indeed
 4 improve the technology of wireless communication.

5 204. The asserted claims of the '325 Patent are not directed to wireless communication
 6 over a network generally, but rather are limited to a particular application of wireless
 7 communication over a network, in that they are limited to "earphones" with "a digital signal
 8 processor that provides a sound quality enhancement for the audio content played by the at least
 9 one acoustic transducers of the earphone; and a baseband processor circuit that is in communication
 10 with the wireless communication circuit of the earphone.

11 205. A third party could communicate wirelessly over a network without practicing the
 12 asserted claims of the '325 Patent, such as by not using "earphones" for wireless communication
 13 over the network, not using earphones that have a baseband processor and a digital signal processor,
 14 or not using earphones with a docking station.

15 206. In addition to the wireless communication elements, the asserted claims of the '325
 16 Patent therefore recite components that transform one form of energy to another form of energy.
 17 The asserted claims of the '325 Patent recite that the claimed headphone assembly comprises both
 18 acoustic transducers and a microphone. In this context, an acoustic transducer converts an electrical
 19 signal to mechanical energy (i.e., sound waves), such as by vibrating a membrane in the acoustic
 20 transducer. A microphone converts mechanical energy (i.e., sound waves) to an electrical signal
 21 based on vibrations of a membrane of the microphone caused by the sound waves.

22 207. Claim 18 of the '325 Patent is therefore not directed to an abstract idea, and is patent
 23 eligible subject matter pursuant to *Alice*, step 1.

24 208. What is more, Claim 18 of the '325 Patent is an inventive concept at least because
 25 the combination of claim limitations was not well-understood, routine, or conventional. In
 26 particular, despite repeated challenges at the PTAB, the Board has consistently found (in denial of
 27 institution and in a final written decision) that Claim 18 is directed to an inventive concept.

28

1 209. These statements of inventiveness are not conclusory; quite to the contrary, some of
 2 the largest headphone manufacturers in the world mustered the strength of some of the most
 3 sophisticated lawyers and experts in the world and, in the one (of two) IPR petitions to reach final
 4 written decision, the PTAB nevertheless found that Claim 18 is directed to an inventive concept.

5 210. Thus, in the event *Alice*'s step 2 is reached, Claim 18 of the '325 Patent recites an
 6 inventive concept and demonstrates that that claim is directed to patent eligible subject matter.

7 211. Further confirming that the '325 Patent is directed to patent eligible subject matter,
 8 the examiner in a family member application recently issued a notice of allowance for a similar set
 9 of claims to Claim 18 of the '325 Patent in view of considering this Court's Dkt. 88 Order
 10 dismissing Koss' First Amended Complaint.

11 212. In particular, Koss submitted this Court's Dkt. 88 Order in an IDS during
 12 examination of U.S. Application Serial No. 17/812,911, which is in the same patent family as the
 13 '325 Patent and which claims priority through several continuation applications to the '325 Patent.

14 213. The Examiner issued a "Corrected Notice of Allowance" on November 30, 2022
 15 (Exhibit J) in which he stated that "[t]he Office carefully review [sic] IDS (Koss Corp V.
 16 Plantronics Inc) filed on 11/21/2022 Order Granting Motion Dismiss" and nevertheless allowed the
 17 pending claims.

18 214. This confirms that the Office, which issued the '325 Patent in view of the Supreme
 19 Court's *Alice* ruling without rejecting the claims, under that ruling (or under 35 U.S.C. § 101 at all)
 20 views the subject matter of Koss' patent portfolio as being directed to patent eligible subject matter.

21 215. There is no reason to disturb the presumption of validity under 35 U.S.C. § 101 that
 22 the '325 Patent (and any issued patent) enjoys.

23 216. Plantronics has made, had made, used, imported, supplied, distributed, sold, and/or
 24 offered for sale products and/or systems, including systems in which certain BackBeat branded
 25 products and/or systems, including, but not limited to, the BackBeat Fit 3100 Headphones, are
 26 incorporated ("Accused '325 Headphones").

27 217. As set forth in the attached non-limiting claim chart (Exhibit N), Plantronics has
 28 infringed and is infringing at least Claim 18 of the '325 Patent by making, having made, using,

1 importing, supplying, distributing, selling, and/or offering for sale the Accused '325 Headphones,
 2 with specific reference in the claim chart to the BackBeat Fit 3100 product. In particular, the use
 3 of the Accused '325 Headphones by Plantronics to, for example, demonstrate those products in
 4 brick-and-mortar stores in San Francisco Bay Area, California or to, for example, test those
 5 products, constitute acts of direct infringement of Claim 18 of the '325 Patent.

6 218. Plantronics actively induces infringement of at least Claim 18 of the '325 Patent by
 7 selling the Accused '325 Headphones with instructions as to how to use the Accused '325
 8 Headphones in a system such as that recited in the '325 Patent. Plantronics aids, instructs, or
 9 otherwise acts with the intent to cause an end user to use the Accused '325 Headphones in an
 10 infringing manner. Plantronics knew of the '325 Patent and knew that its use and sale of the
 11 Accused '325 Headphones infringe at least Claim 18 of the '325 Patent. When a customer of
 12 Plantronics uses the Accused '325 Headphones as specifically instructed by Plantronics, the
 13 customer uses the headphones in a manner that infringes at least Claim 18 of the '325 Patent.

14 219. Plantronics is also liable for contributory infringement of at least Claim 18 of the
 15 '325 Patent by providing, and by having knowingly provided, a material part of the
 16 instrumentalities, namely the Accused '325 Headphones, used to infringe Claim 18 of the '325
 17 Patent. The Accused '325 Headphones, have no substantial non-infringing uses. When an end user
 18 uses the Accused '325 Headphones in combination with, for example, a smart phone such as, for
 19 example, an Apple iPhone and/or an Apple Watch, the end user directly infringes Claim 18 of the
 20 '325 Patent. Plantronics knew that the Accused '325 Headphones were especially made for use in
 21 an infringing manner prior to the filing of this lawsuit. For at least the reasons set forth above,
 22 Plantronics contributes to the infringement of the '325 Patent by others.

23 220. Koss has been damaged as a result of the infringing conduct by Plantronics alleged
 24 above. Thus, Plantronics is liable to Koss in an amount that compensates it for such infringement,
 25 which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by
 26 this Court under 35 U.S.C. § 284.

27 221. Plantronics's infringement of the '325 Patent has caused, and will continue to cause,
 28 Koss to suffer substantial and irreparable harm.

1 222. Plantronics has been aware that it infringes the '325 Patent since at least July 10,
 2 2020, upon the receipt of the letter attached as Exhibit I. Since obtaining knowledge of its
 3 infringing activities, Plantronics has failed to cease its infringing activities. Further, Plantronics
 4 has continued its infringing activities, disregarding Koss's patent rights, since the filing of the
 5 original complaint on July 22, 2020.

6 223. Plantronics's infringement of the '325 Patent is, has been, and continues to be,
 7 willful, intentional, deliberate, and/or in conscious disregard of Koss's rights under the patent.

8 224. Koss has complied with 35 U.S.C. § 287 with respect to the '325 Patent.

FOURTH CAUSE OF ACTION

(Infringement of the '498 Patent)

11 225. Koss incorporates by reference and realleges each and every allegation of
 12 Paragraphs 1 through 224 as if set forth herein.

13 226. Koss owns all substantial rights, interest, and title in and to the '498 Patent,
 14 including the sole and exclusive right to prosecute this action and enforce the '498 Patent against
 15 infringers, and to collect damages for all relevant times.

16 227. The '498 Patent generally describes wireless earphones that comprise a transceiver
 17 circuit for receiving streaming audio from a data source, such as a digital audio player or a
 18 computer, over a wireless network. The '498 Patent describes and claims a system-on-chip that
 19 mutes audio content streamed to the headphone in response to detecting an incoming wireless
 20 communication to the headphone, a specific improvement to the art. Various additional functional
 21 and hardware limitations are described and claimed in the dependent claims of the '498 Patent.

22 228. The written description of the '498 Patent describes in technical detail each of the
 23 limitations of the claims, allowing a skilled artisan to understand the scope of the claims and how
 24 the non-conventional and non-generic combination of claim limitations is patentably distinct from
 25 and improved upon what may have been considered conventional or generic in the art at the time
 26 of the invention.

27 229. The claims of the '498 Patent are directed to statutorily eligible subject matter, as
 28 they do not recite an abstract idea and are also directed to an inventive concept.

1 230. The '498 Patent has been challenged at the PTAB in *inter partes* review on only one
 2 (1) occasion.

3 231. In particular, on the second-to-last day of its statutory one-year period to file,
 4 Plantronics filed an IPR petition against the '498 Patent. An institution decision is expected by
 5 early May, 2023.

6 232. Plantronics' IPR petition as to the '498 Patent includes a single ground addressing
 7 Claim 23; that ground relies on five (5) different prior art references in purported combination.
 8 Indeed, Plantronics' sole ground for purported invalidity of independent Claim 1 (from which claim
 9 23 depends) relies on four (4) different prior art references. This alone demonstrates that the claims
 10 of the '498 patent are directed to an inventive concept; Plantronics, even with the benefit of all of
 11 Apple's and Bose's prior IPR work, needs to resort to four- and five- reference combinations for
 12 purposes of demonstrating what Plantronics believes to be obviousness.

13 233. Claim 23 of the '498 Patent contains a similar "Signal Strength" limitation to the
 14 one that the Board has consistently found not to be unpatentable.

15 234. The claims of the '498 Patent were all prosecuted after the Supreme Court's decision
 16 in *Alice Corp. v. CLS Bank Int'l.*, 578 U.S. 208 (2014), and were thus examined against the
 17 backdrop of the Supreme Court's guidance.

18 235. The claims of the '498 Patent were never rejected under 35 U.S.C. § 101.

19 236. Claim 23 of the '498 Patent depends from claim 1 and recites as follows:

20 1. Headphones comprising:

21 a pair of first and second wireless earphones to be worn simultaneously by
 22 a user, wherein each of the first and second wireless earphones comprises at least
 23 one acoustic transducer for producing audible sound;

24 wherein the first wireless earphone comprises a first system-on-chip (SOC),
 25 wherein the first SOC comprises:

26 a first wireless communication circuit for receiving and transmitting
 27 wireless signals;

28 a first processor circuit connected to the first wireless
 29 communication circuit; and

30 a first memory unit in communication with the first processor circuit
 31 for storing firmware updates pushed to the headphones from a remote
 32 network server;

33 wherein the first wireless communication circuit is for receiving audio
 34 content streamed wirelessly to the headphones from a first audio content source,

1 such that the first and second wireless earphones play the audio content streamed
 2 wirelessly to the headphones; and

3 wherein the first processor circuit is configured to, in response to detecting
 4 an incoming wireless communication to the headphones:

5 mute the audio content streamed wirelessly to the headphone being
 6 played by the headphones; and

7 output audio of the incoming wireless communication circuit via the
 8 first and second wireless earphones.

9
 10 23. The headphones of claim 1, wherein the processor circuit for each earphone is
 11 configured to transition from playing the audio content streamed wirelessly to the
 12 headphones from the first digital audio source via a first wireless communication
 13 link to playing the audio content streamed wirelessly to the headphones from a
 14 second digital audio source via a second wireless communication link automatically
 15 based on, at least in part, a signal strength for the second wireless communication
 16 link.

17 237. The inventions recited in Claim 23 address technological problems and provide
 18 technological solutions that were not well-understood, routine, or conventional at the time of the
 19 invention. This is demonstrated by (1) the initial issuance of the '498 Patent and (2) the Board's
 20 repeated confirmation, in IPR petitions filed by Apple and Bose, that claims reciting the "Signal
 21 Strength" concept are not unpatentable.

22 238. In particular, the inventions recited in Claim 23 address the following technological
 23 problems and provide technological solutions that were not well understood, routine, or
 24 conventional at the time of the invention:

- 25 a. Selectively muting and unmuting headphones in a headphone assembly
- 26 b. Transitioning to play digital audio content from a second digital audio source based
 27 on at least a signal strength level of a second wireless communication link

28 239. At least these features confine the claim to a series of particular solutions to a series
 29 of identified problems.

30 240. These features, which have driven the PTAB to find that claims reciting similar
 31 features are not unpatentable, demonstrate some of the differences between the claim and the prior
 32 art, and demonstrate that it is not true that "the major difference between the prior art and Koss's
 33 claimed invention is that the claimed invention is wireless..."

1 241. A person of ordinary skill in the art reading the '498 Patent and its claims (including
 2 Claim 23) would understand that (a) the Asserted Patents' disclosures and claims are drawn to
 3 solving specific, technical problems and (b) the claimed subject matter represents an advancement
 4 in the technical field of the Asserted Patents. For example, as to both (a) and (b), the hardware and
 5 software included in the recited headphone assembly of Claim 23 to transition from one source of
 6 audio information to another source of audio information based, at least in part, on a determined
 7 signal strength of a second wireless communication link (i.e., the link of the source of audio
 8 information to which the headphone assembly is transitioning) contributes to solving the technical
 9 problem that wireless headphone assemblies would be improved if they could account for the
 10 situation where a user walks away from one device and near another device, both of which are
 11 sources of audio content. The hardware for handling this situation, and permitting the headphone
 12 assembly to transition to another source of information when appropriate, further contributes to
 13 solving this technical problem.

14 242. The claims of the '498 Patent do not preempt all techniques for or approaches to
 15 accomplishing the same or a similar end to what they recite. For example, the claims do not preempt
 16 the use of the techniques taught in the prior art cited on the face of the Asserted Patents, none of
 17 which, as the patent examiners found, disclose or render obvious the claimed inventions, further
 18 showing that the claims are not well-understood, routine, or conventional.

19 243. The claims of the '498 Patent do not merely recite the performance of some generic
 20 computing technique. Instead, the '498 Patent claims recite one or more inventive concepts that
 21 are rooted in headphone systems and audio technology, whose inventiveness has already been
 22 confirmed by the PTAB's final written decisions on similar claim scope. Specifically, the '498
 23 Patent addresses and provides a solution to a long-standing problem in the area of wireless
 24 headphone technology: the problem presented by the fact that a wireless headphone user can simply
 25 walk away, and distance himself or herself from, the source of the wireless data being played back
 26 in the headphones.

27 244. With the inventive concepts recited in at least similar claims the PTAB has already
 28 confirmed are patentable, systems involving wireless headphone assemblies can now seamlessly

1 address the problem that a user may walk away from one source of audio information and toward
 2 another source of audio information. A person of ordinary skill in the art would thus understand
 3 that the claims of the Asserted Patents are directed to specific improvements in headphone
 4 assemblies and similar systems.

5 245. Nor can it be said that the major difference between the prior art and Koss's claimed
 6 invention in Claim 23 of the '498 Patent is wireless, with the attendant benefits that such a system
 7 provides. Indeed, Claim 23 of the '498 Patent demonstrates a technological improvement, and not
 8 simply a feature of wireless communication; the PTAB has confirmed this to be the case. And the
 9 PTAB's analysis of similar claim scope confirms that the system recited in Claim 23 of the '498
 10 Patent is not "well understood."

11 246. Moreover, Claim 23 of the '498 Patent recites physical components that improve
 12 the technology of wireless communication. The Board has confirmed that prior systems did not
 13 have the hardware and software required to perform the "signal strength" aspects of Claim 23, and
 14 thus confirmed that these features indeed improve the technology of wireless communication.

15 247. In addition to wireless communication elements, the asserted claims of the '498
 16 Patent are not directed to wireless communication over a network generally, but rather are limited
 17 to a particular application of wireless communication over a network, in that they are limited to
 18 "earphones" with an "SOC" that, "mute the audio content streamed wirelessly to the headphone
 19 being played by the headphones" and "output audio of the incoming wireless communication circuit
 20 via the first and second wireless earphones" and that transition from playing digital audio contend
 21 received wireless from a first digital audio source received via a first wireless communication link
 22 to playing digital audio contend received wireless from a second digital audio source received via
 23 a second wireless communication link, based on the signal strength for the second wireless
 24 communication link.

25 248. A third party could communicate wirelessly over a network without practicing the
 26 asserted claims of the '498 Patent, such as by not using "earphones" for the wireless communication
 27 over the network, not implementing the earphones with an SOC, not using an SOC that performs
 28 the mute/output required, and/or not transitioning from playing digital audio contend received

1 wireless from a first digital audio source received via a first wireless communication link to playing
 2 digital audio contend received wireless from a second digital audio source received via a second
 3 wireless communication link, based on the signal strength for the second wireless communication
 4 link.

5 249. The asserted claims of the '498 Patent recite components that transform one form
 6 of energy to another form of energy. The asserted claims of the '498 Patent recite that the claimed
 7 headphone assembly comprises both acoustic transducers and a microphone. In this context, an
 8 acoustic transducer converts an electrical signal to mechanical energy (i.e., sound waves), such as
 9 by vibrating a membrane in the acoustic transducer. A microphone converts mechanical energy
 10 (i.e., sound waves) to an electrical signal based on vibrations of a membrane of the microphone
 11 caused by the sound waves.

12 250. Claim 23 of the '498 Patent is therefore not directed to an abstract idea, and is patent
 13 eligible subject matter pursuant to *Alice*, step 1.

14 251. What is more, Claim 23 of the '498 Patent is an inventive concept at least because
 15 the combination of claim limitations was not well-understood, routine, or conventional. In
 16 particular, despite repeated challenges at the PTAB, the Board has consistently found (in denial of
 17 institution and in a final written decision) that claim 23 is directed to an inventive concept.

18 252. These statements of inventiveness are not conclusory; quite to the contrary, some of
 19 the largest headphone manufacturers in the world mustered the strength of some of the most
 20 sophisticated lawyers and experts in the world and the PTAB nevertheless repeatedly found that
 21 scope like that recited in Claim 23 of the '498 is patent eligible.

22 253. Thus, in the event *Alice*'s step 2 is reached, Claim 23 of the '498 Patent recites an
 23 inventive concept and demonstrates that that claim is directed to patent eligible subject matter.

24 254. Further confirming that the '498 Patent is directed to patent eligible subject matter,
 25 the examiner in a family member application recently issued a notice of allowance for a similar set
 26 of claims to Claim 23 of the '498 Patent in view of considering this Court's Dkt. 88 Order
 27 dismissing Koss' First Amended Complaint.

28

1 255. In particular, Koss submitted this Court's Dkt. 88 Order in an IDS during
 2 examination of U.S. Application Serial No. 17/812,911, which is in the same patent family as the
 3 '498 Patent and which claims priority through several continuation applications to the '498 Patent.

4 256. The Examiner issued a "Corrected Notice of Allowance" on November 30, 2022
 5 (Exhibit J) in which he stated that "[t]he Office carefully review [sic] IDS (Koss Corp V.
 6 Plantronics Inc) filed on 11/21/2022 Order Granting Motion Dismiss" and nevertheless allowed the
 7 pending claims.

8 257. This confirms that the Office, which issued the '498 Patent in view of the Supreme
 9 Court's *Alice* ruling without rejecting the claims, under that ruling (or under 35 U.S.C. § 101 at all)
 10 views the subject matter of Koss' patent portfolio as being directed to patent eligible subject matter.

11 258. There is no reason to disturb the presumption of validity under 35 U.S.C. § 101 that
 12 the '498 Patent (and any issued patent) enjoys.

13 259. Plantronics has made, had made, used, imported, supplied, distributed, sold, and/or
 14 offered for sale products and/or systems, including systems in which its BackBeat-branded products
 15 and/or systems, including, but not limited to, the BackBeat FIT 300 Headphones, as well as certain
 16 Voyager branded headphones are incorporated ("Accused '498 Headphones"). On information and
 17 belief, the BackBeat Fit 300 headphones were offered for sale and actually sold by Plantronics as
 18 of August 26, 2020.

19 260. As set forth in the attached non-limiting claim chart (Exhibit O), Plantronics has
 20 infringed and is infringing at least Claim 23 of the '498 Patent by making, having made, using,
 21 importing, supplying, distributing, selling, and/or offering for sale the Accused '498 Headphones,
 22 with specific reference in the claim chart to the BackBeat Fit 300 product. In particular, the use of
 23 the Accused '498 Headphones by Plantronics to, for example, demonstrate those products in brick-
 24 and-mortar stores in San Francisco Bay Area, California or to, for example, test those products,
 25 constitute acts of direct infringement of Claim 23 of the '498 Patent.

26 261. Plantronics actively induces infringement of at least Claim 23 of the '498 Patent by
 27 selling the Accused '498 Headphones with instructions as to how to use the Accused '498
 28 Headphones in a system such as that recited in the '498 Patent. Plantronics aids, instructs, or

1 otherwise acts with the intent to cause an end user to use the Accused '498 Headphones in an
 2 infringing manner. Plantronics knew of the '498 Patent and knew that its use and sale of the
 3 Accused '498 Headphones infringe at least Claim 23 of the '498 Patent. When a customer of
 4 Plantronics uses the Accused '498 Headphones as specifically instructed by Plantronics, the
 5 customer uses the headphones in a manner that infringes at least Claim 23 of the '498 Patent.

6 262. Plantronics is also liable for contributory infringement of at least Claim 23 of the
 7 '498 Patent by providing, and by having knowingly provided, a material part of the
 8 instrumentalities, namely the Accused '498 Headphones, used to infringe Claim 23 of the '498
 9 Patent. The Accused '498 Headphones have no substantial non-infringing uses. When an end user
 10 uses the Accused '498 Headphones in combination with, for example, a smart phone such as, for
 11 example, an Android-based smart phone and/or a peripheral device such as, for example, an
 12 Android-based tablet, the end user directly infringes Claim 23 of the '498 Patent. Plantronics knew
 13 that the Accused '498 Headphones were especially made for use in an infringing manner prior to
 14 the filing of this lawsuit. For at least the reasons set forth above, Plantronics contributes to the
 15 infringement of the '498 Patent by others.

16 263. Koss has been damaged as a result of the infringing conduct by Plantronics alleged
 17 above. Thus, Plantronics is liable to Koss in an amount that compensates it for such infringement,
 18 which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by
 19 this Court under 35 U.S.C. § 284.

20 264. Plantronics's infringement of the '498 Patent has caused, and will continue to cause,
 21 Koss to suffer substantial and irreparable harm.

22 265. Plantronics has been aware that it infringes the '498 Patent since at least September
 23 30, 2021, upon the receipt of the letter attached as Exhibit G. Since obtaining knowledge of its
 24 infringing activities, Plantronics has failed to cease its infringing activities.

25 266. Plantronics's infringement of the '498 Patent is, has been, and continues to be,
 26 willful, intentional, deliberate, and/or in conscious disregard of Koss's rights under the patent.

27 267. Koss has complied with 35 U.S.C. § 287 with respect to the '498 Patent.

28

FIFTH CAUSE OF ACTION**(Infringement of the '852 Patent)**

268. Koss incorporates by reference and realleges each and every allegation of Paragraphs 1 through 267 as if set forth herein.

269. Koss owns all substantial rights, interest, and title in and to the '852 Patent, including the sole and exclusive right to prosecute this action and enforce the '852 Patent against infringers, and to collect damages for all relevant times.

270. The '852 Patent generally describes wireless earphones that comprise a transceiver circuit for receiving streaming audio from a data source, such as a digital audio player or a computer, over a wireless network. The '852 Patent describes and claims a system that includes a mobile computing device with a graphical user interface thereon to allow the user to select an audio control setting for the wireless headphones. Various additional functional and hardware limitations are described and claimed in the dependent claims of the '852 Patent.

271. The written description of the '852 Patent describes in technical detail each of the limitations of the claims, allowing a skilled artisan to understand the scope of the claims and how the non-conventional and non-generic combination of claim limitations is patentably distinct from and improved upon what may have been considered conventional or generic in the art at the time of the invention.

272. The claims of the '852 Patent are directed to statutorily eligible subject matter, as they do not recite an abstract idea and are also directed to an inventive concept.

273. The '852 Patent has been challenged at the PTAB in *inter partes* review on only one (1) occasion.

274. In particular, on the second-to-last day of its statutory one-year period to file, Plantronics filed an IPR petition against the '852 Patent. An institution decision is expected by early May, 2023.

275. Plantronics' IPR petition as to the '852 Patent includes a single ground addressing claim 15; that ground relies on six (6) different prior art references in purported combination. Indeed, Plantronics' sole ground for purported invalidity of independent claim 1 (from which claim

1 15 ultimately depends) relies on four (4) different prior art references. This alone demonstrates
 2 that the claims of the '852 patent are directed to an inventive concept; Plantronics, even with the
 3 benefit of all of Apple's and Bose's prior IPR work, needs to resort to four-, five-, or six-reference
 4 combinations for purposes of demonstrating what Plantronics believes to be obviousness.

5 276. Claim 15 of the '852 Patent contains a similar "digital signal processor" limitation
 6 to the one that the Board has found not to be unpatentable with regard to the '325 Patent.

7 277. The claims of the '852 Patent were all prosecuted after the Supreme Court's decision
 8 in *Alice Corp. v. CLS Bank Int'l.*, 578 U.S. 208 (2014), and were thus examined against the
 9 backdrop of the Supreme Court's guidance.

10 278. The claims of the '852 Patent were never rejected under 35 U.S.C. § 101.

11 279. Claim 15 of the '852 Patent depends from Claim 9, Claim 8, and ultimately Claim
 12 1 and recites as follows:

13 1. A system comprising:

14 wireless headphones comprising first and second earphones; and
 15 a mobile computer device that is in wireless communication with, and
 16 untethered to, the wireless headphones, wherein the mobile computer device is for
 17 wirelessly pairing with the wireless headphones such that the wireless headphones
 18 play audio content transmitted wirelessly to the wireless headphones from the
 19 mobile computer device, wherein the mobile computer device is for wirelessly
 20 pairing with the wireless headphones via an ad hoc wireless communication link
 21 between the mobile computer device and the wireless headphones, and wherein the
 22 ad hoc wireless communication link comprises a Bluetooth wireless
 23 communication link; and

24 wherein the mobile computer device comprises a screen that is configured
 25 to display a graphical user interface through which a user of the wireless
 26 headphones selects an audio control setting for the wireless headphones to be
 27 applied to the wireless headphones when the wireless headphones play the audio
 28 content, and wherein the wireless headphones receive the audio control setting via
 a wireless data communication link.

29 8. The system of claim 1, wherein the first and second earphones are physically
 30 separate such that when the wireless headphones are worn by the user, the first and
 31 second earphones are not physically connected.

32 9. The system of claim 8, wherein each of the first and second earphone comprises:
 33 an acoustic transducer; a processor circuit; a wireless communication circuit; a
 34 microphone; and a rechargeable battery.

1 15. The system of claim 9, wherein the processor circuit of each of the first and
 2 second earphones comprises a digital signal processor circuit that provides a sound
 3 quality enhancement for the audio content played by the acoustic transducer of the
 4 earphone.

5 280. The inventions recited in Claim 15 address technological problems and provide
 6 technological solutions that were not well-understood, routine, or conventional at the time of the
 7 invention. This is demonstrated by (1) the initial issuance of the '852 Patent and (2) the Board's
 8 confirmation, in an IPR filed by Apple that claims reciting a "digital signal processor" are not
 9 unpatentable.

10 281. In particular, the inventions recited in Claim 15 address the following technological
 11 problems and provide technological solutions that were not well understood, routine, or
 12 conventional at the time of the invention:

- 13 a. A digital signal processor that provides a sound quality enhancement for audio
 14 content played back through the earphones and
- 15 b. A separate mobile computer device that provides users with

16 282. At least these features confine the claim to a series of particular solutions to a series
 17 of identified problems.

18 283. The physical components required to perform these technical innovations (e.g., a
 19 digital signal processor) are the focus of Claim 15 of the '852 Patent.

20 284. These features, which drove the PTAB to find that a claim with features similar to
 21 Claim 15 is not unpatentable, demonstrate some of the differences between the claim and the prior
 22 art, and demonstrate that it is not true that "the major difference between the prior art and Koss's
 23 claimed invention is that the claimed invention is wireless..."

24 285. A person of ordinary skill in the art reading the '852 Patent and its claims (including
 25 Claim 15) would understand that (a) the Asserted Patents' disclosures and claims are drawn to
 26 solving specific, technical problems and (b) the claimed subject matter represents an advancement
 27 in the technical field of the Asserted Patents. For example, as to both (a) and (b), the hardware and
 28 software included in the recited headphone assembly of Claim 15 to provide sound quality
 29 enhancements with certain digital signal processors contributes to solving the technical problem of

1 how to make a relatively small wireless device sound good and provide adequate battery life. The
 2 hardware for handling this situation, and recited specifically in Claim 15, contributes to the solution
 3 of this technical problem.

4 286. The claims of the '852 Patent do not preempt all techniques for or approaches to
 5 accomplishing the same or a similar end to what they recite. For example, the claims do not preempt
 6 the use of the techniques taught in the prior art cited on the face of the Asserted Patents, nor the art
 7 cited in the various PTAB proceedings regarding the '325 Patent, none of which, as the patent
 8 examiners found, disclose or render obvious the claimed inventions, further showing that the claims
 9 are not well-understood, routine, or conventional.

10 287. The claims of the '852 Patent do not merely recite the performance of some generic
 11 computing technique. Instead, the '852 Patent claims recite one or more inventive concepts that
 12 are rooted in headphone systems and audio technology, whose inventiveness has already been
 13 confirmed by the PTAB's final written decision as to the '325 Patent and by various parties' failure
 14 to even secure institution of IPRs on the '325 Patent. Specifically, the '852 Patent addresses and
 15 provides a solution to a long-standing problem in the area of wireless headphone technology: the
 16 problem of providing acceptable quality audio in a battery operated device for an acceptable amount
 17 of time between charging.

18 288. With the inventive concepts recited in at least claims that contain limitations the
 19 PTAB has already confirmed are patentable, systems involving wireless headphone assemblies can
 20 now seamlessly address the problem of low quality audio in a device with short battery life. A
 21 person of ordinary skill in the art would thus understand that the claims of the Asserted Patents are
 22 directed to specific improvements in headphone assemblies and similar systems.

23 289. Nor can it be said that the major difference between the prior art and Koss's claimed
 24 invention in Claim 15 of the '852 Patent is focused on the wireless capability, and not any of the
 25 recited physical components in the claim. Indeed, Claim 15 of the '852 Patent demonstrates a
 26 technological improvement, and not simply a feature of wireless communication; the PTAB has
 27 confirmed this to be the case. And the PTAB's analysis of the '325 Patent confirms that the system
 28 recited in Claim 15 of the '852 Patent merely contains "generic physical elements of the prior art."

1 290. Moreover, Claim 15 of the '852 Patent recites physical components that improve
2 the technology of wireless headphones. The Board has confirmed, in connection with the '325
3 Patent, that prior systems did not have the hardware and software required by Claim 15, and thus
4 confirmed that these features indeed improve the technology of wireless communication.

5 291. In addition to wireless communication elements, the asserted claims of the '852
6 Patent are not directed to wireless communication over a network generally, but rather are limited
7 to a particular application of wireless communication over a network, in that they are limited to
8 "earphones" with "a digital signal processor circuit that provides a sound quality enhancement for
9 the audio content played by the acoustic transducer of the earphone."

10 292. A third party could communicate wirelessly over a network without practicing the
11 asserted claims of the '852 Patent, such as by not using "earphones" for wireless communication
12 over the network, not using earphones that have a digital signal processor, or not using earphones
13 that rely on a user interface for configuration.

14 293. The asserted claims of the '852 Patent therefore recite components that transform
15 one form of energy to another form of energy. The asserted claims of the '852 Patent recite that
16 the claimed headphone assembly comprises both acoustic transducers and a microphone. In this
17 context, an acoustic transducer converts an electrical signal to mechanical energy (i.e., sound
18 waves), such as by vibrating a membrane in the acoustic transducer. A microphone converts
19 mechanical energy (i.e., sound waves) to an electrical signal based on vibrations of a membrane of
20 the microphone caused by the sound waves.

21 294. Claim 15 of the '852 Patent is therefore not directed to an abstract idea, and is patent
22 eligible subject matter pursuant to *Alice*, step 1.

23 295. What is more, Claim 15 of the '852 Patent is an inventive concept at least because
24 the combination of claim limitations was not well-understood, routine, or conventional. In
25 particular, despite repeated challenges at the PTAB, the Board has consistently found (in denial of
26 institution and in a final written decision) that claims with similar subject matter are directed to an
27 inventive concept.

1 296. These statements of inventiveness are not conclusory; quite to the contrary, some of
 2 the largest headphone manufacturers in the world mustered the strength of some of the most
 3 sophisticated lawyers and experts in the world and, in the one (of two) IPR petitions to reach final
 4 written decision, the PTAB nevertheless found that claims with similar scope to Claim 15 of the
 5 '852 Patent are directed to an inventive concept.

6 297. Thus, in the event *Alice*'s step 2 is reached, Claim 15 of the '852 Patent recites an
 7 inventive concept and demonstrates that that claim is directed to patent eligible subject matter.

8 298. Further confirming that the '852 Patent is directed to patent eligible subject matter,
 9 the examiner in a family member application recently issued a notice of allowance for a similar set
 10 of claims to Claim 15 of the '852 Patent in view of considering this Court's Dkt. 88 Order
 11 dismissing Koss' First Amended Complaint.

12 299. In particular, Koss submitted this Court's Dkt. 88 Order in an IDS during
 13 examination of U.S. Application Serial No. 17/812,911, which is in the same patent family as the
 14 '852 Patent and which claims priority through several continuation applications to the '852 Patent.

15 300. The Examiner issued a "Corrected Notice of Allowance" on November 30, 2022
 16 (Exhibit J) in which he stated that "[t]he Office carefully review [sic] IDS (Koss Corp V.
 17 Plantronics Inc) filed on 11/21/2022 Order Granting Motion Dismiss" and nevertheless allowed the
 18 pending claims.

19 301. This confirms that the Office, which issued the '852 Patent in view of the Supreme
 20 Court's *Alice* ruling without rejecting the claims, under that ruling (or under 35 U.S.C. § 101 at all)
 21 views the subject matter of Koss' patent portfolio as being directed to patent eligible subject matter.

22 302. There is no reason to disturb the presumption of validity under 35 U.S.C. § 101 that
 23 the '852 Patent (and any issued patent) enjoys.

24 303. Plantronics has made, had made, used, imported, supplied, distributed, sold, and/or
 25 offered for sale products and/or systems, including systems in which its BackBeat-branded products
 26 and/or systems, including, but not limited to, the BackBeat FIT 3100 Headphones, as well as other
 27 BackBeat Fit, BackBeat Go, and BackBeat Pro headphones are incorporated ("Accused '852
 28 Headphones"). On information and belief, the BackBeat Fit 3100 headphones were offered for sale

1 and actually sold by Plantronics for use with its BackBeat Mobile Application as of November 25,
 2 2020. On information and belief, the BackBeat mobile application is still supported by Plantronics
 3 and the mobile application is still available for its customers to download as of October 1, 2021.

4 304. As set forth in the attached non-limiting claim chart (Exhibit N), Plantronics has
 5 infringed and is infringing at least Claim 15 of the '852 Patent by making, having made, using,
 6 importing, supplying, distributing, selling, and/or offering for sale the Accused '852 Headphones
 7 along with its BackBeat branded mobile application, with specific reference in the claim chart to
 8 the BackBeat Fit 3100 product. In particular, the use of the Accused '852 Headphones by
 9 Plantronics to, for example, demonstrate those products in brick-and-mortar stores in San Francisco
 10 Bay Area, California or to, for example, test those products, constitute acts of direct infringement
 11 of Claim 15 of the '852 Patent.

12 305. Plantronics actively induces infringement of at least Claim 15 of the '852 Patent by
 13 selling the Accused '852 Headphones with instructions as to how to use the Accused '852
 14 Headphones in a system such as that recited in the '852 Patent. Plantronics aids, instructs, or
 15 otherwise acts with the intent to cause an end user to use the Accused '852 Headphones along with
 16 the BackBeat mobile application in an infringing manner. Plantronics knew of the '852 Patent and
 17 knew that its use and sale of the Accused '852 Headphones infringe at least Claim 15 of the '852
 18 Patent. When a customer of Plantronics uses the Accused '852 Headphones as specifically
 19 instructed by Plantronics, the customer uses the headphones in a manner that completes the system
 20 of Claim 15, thereby infringing Claim 15 of the '852 Patent.

21 306. Plantronics is also liable for contributory infringement of at least Claim 15 of the
 22 '852 Patent by providing, and by having knowingly provided, a material part of the
 23 instrumentalities, namely the Accused '852 Headphones along with the BackBeat mobile
 24 application, used to infringe Claim 15 of the '852 Patent. The Accused '852 Headphones have no
 25 substantial non-infringing uses. When an end user uses the Accused '852 Headphones in
 26 combination with, for example, a smart phone such as, for example, an Apple iPhone and/or a
 27 peripheral device such as, for example, an Apple Watch, the end user directly infringes Claim 15
 28 of the '852 Patent. Plantronics knew that the Accused '852 Headphones were especially made for

1 use in an infringing manner prior to the filing of this lawsuit. For at least the reasons set forth
 2 above, Plantronics contributes to the infringement of the '852 Patent by others.

3 307. Koss has been damaged as a result of the infringing conduct by Plantronics alleged
 4 above. Thus, Plantronics is liable to Koss in an amount that compensates it for such infringement,
 5 which by law cannot be less than a reasonable royalty, together with interest and costs as fixed by
 6 this Court under 35 U.S.C. § 284.

7 308. Plantronics's infringement of the '852 Patent has caused, and will continue to cause,
 8 Koss to suffer substantial and irreparable harm.

9 309. Plantronics has been aware that it infringes the '852 Patent since at least September
 10 30, 2021, upon the receipt of the letter attached as Exhibit L. Since obtaining knowledge of its
 11 infringing activities, Plantronics has failed to cease its infringing activities.

12 310. Plantronics's infringement of the '852 Patent is, has been, and continues to be,
 13 willful, intentional, deliberate, and/or in conscious disregard of Koss's rights under the patent.

14 311. Koss has complied with 35 U.S.C. § 287 with respect to the '852 Patent.

15 **JURY DEMAND**

16 Koss hereby requests a trial by jury on all issues so triable by right.

17 **PRAYER FOR RELIEF**

18 WHEREFORE, Koss requests that:

19 A. The Court find that Plantronics has directly infringed the Patents-in-Suit and hold
 20 Plantronics liable for such infringement;

21 B. The Court find that Plantronics has indirectly infringed the Patents-in-Suit by
 22 inducing its customers to directly infringe the Patents-in-Suit and hold Plantronics liable for such
 23 infringement;

24 C. The Court find that Plantronics has indirectly infringed the Patents-in-Suit by
 25 contributing to Plantronics's customers' direct infringement of the Patents-in-Suit and hold
 26 Plantronics liable for such infringement;

